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A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS.

PUBLISHED BY  
Mitchell Bros. Company.  
(INCORPORATED.)

Vol. IV.

CHICAGO, ILLINOIS, AUGUST 15, 1885.

No. 2.

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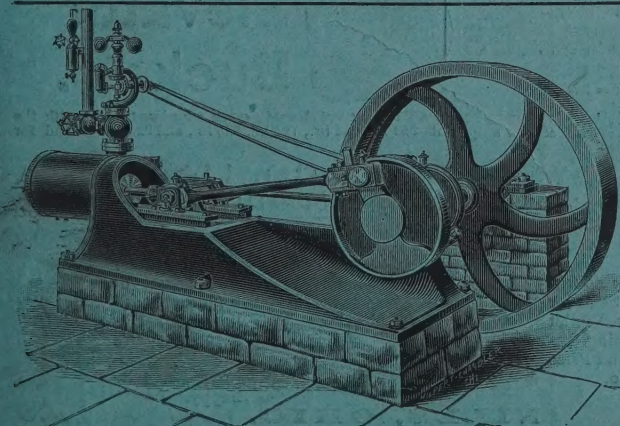
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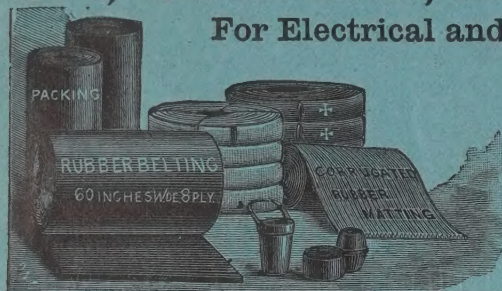


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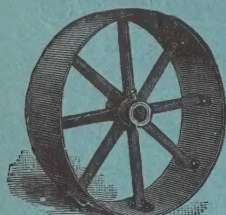
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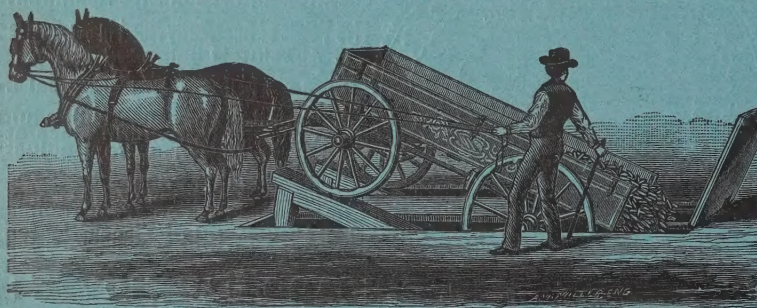
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CHERRYVILLE, KAN., March 9, 1885.  
DEAR SIR:—In answer to your recent favor will say, that with the three elevators we are now operating, built in accordance with plans furnished by you, we are well pleased, and would have no hesitation in recommending you as a skilled and economical designer of Elevators. With the machines and machinery bought of Barnard & Leas Mfg. Co. we are also well pleased, as it is all first-class and satisfactory in every way.

Very truly yours, G. B. SHAW & Co.  
A. C. SHERMAN, Grain Dealer,

ROSSVILLE, KAN., March 5, 1885.  
DEAR SIR:—I desire to say, that by following plans in building my Elevator at St. Marys, Kan., furnished me by you, and placing my order for machinery with Barnard & Leas Mfg. Co., of Moline, Ill., for Wheat Cleaner, Corn Sheller, and Cleaner and Elevator Goods entire, I now have one of the best Elevators in the state. Everything works splendid and to my entire satisfaction.

Respectfully, A. C. SHERMAN.

OFFICE OF TUDOR, ELLIOTT & Co., Grain and Chop-

ped Feed, HOLTON, KAN., March 21, 1885.  
DEAR SIR:—We like the plan of our Elevator very much, and do not think that for a building of the size of ours the plans could be improved upon. Everything is simple and handy, and very easily run. The machinery works fine, and has ever since we started, and the Sheller is the best we have ever seen. The Corn and Wheat Cleaners could not do any better work than they do. We are fully satisfied and pleased with everything, and

should we conclude to erect another Elevator at some other point, will consult you for a plan.

Yours very truly, TUDOR, ELLIOTT & Co.

B. F. BLAKER & Co., Lumber, Building Material, Grain and Flax Seed,  
PLEASANTON, KAN., March 5, 1885.

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Yours very truly, B. F. BLAKER & Co.

BRINSON, HILL & Co., Grain Commission Merchants, OTTAWA, KAN., April 2, 1885.

DEAR SIR:—Replying to your favor of recent date, we take pleasure in saying, our new elevator built here last season, on your plans and specifications, gives us highest possible satisfaction; and the machinery furnished by Barnard and Leas Mfg. Co. is first-class in every respect, and works to our entire satisfaction. We have, up to this date handled about 150,000 bushels of ear corn, and a large amount of other grain through our elevator, and with your complete outfit of machinery, etc., and have not been to a nickel's expense or had one minute's delay from any cause whatever, all of which we credit to your well-arranged plans, and good class of machinery furnished by your house.

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Very truly yours, BRINSON, HILL & Co.

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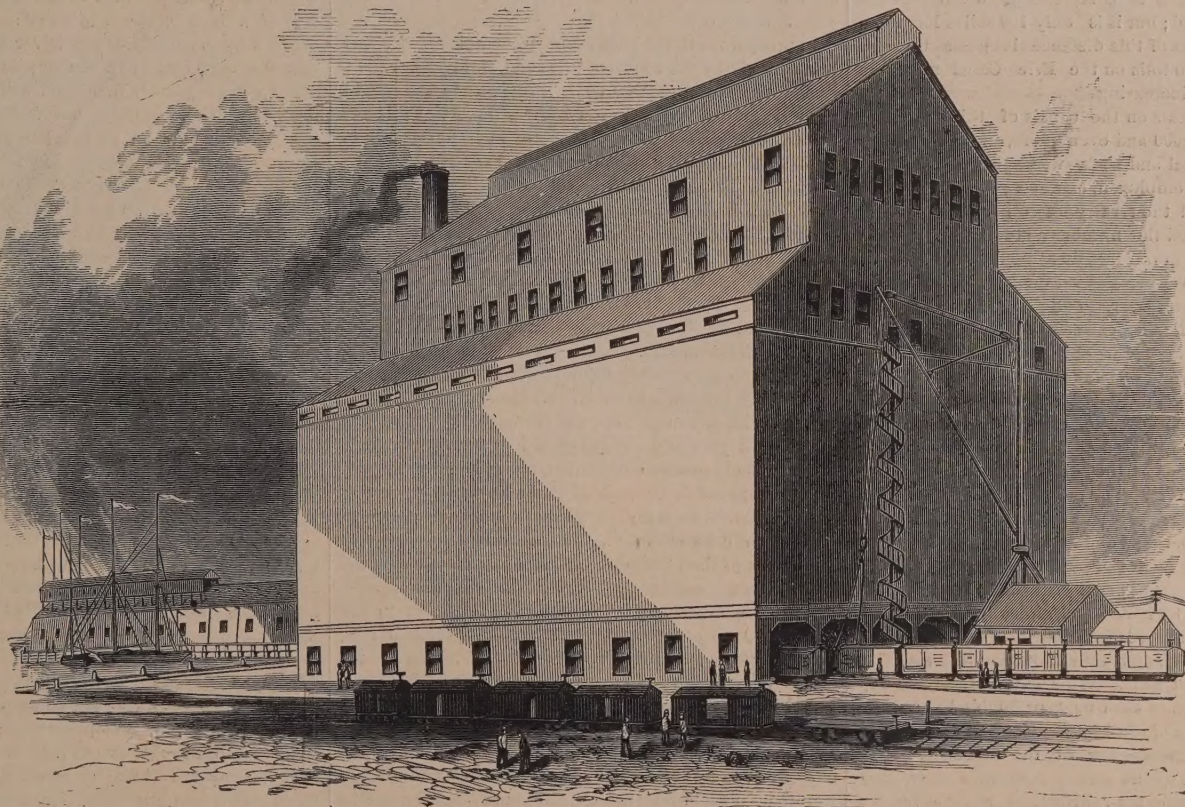
## THE GRAIN COMMERCE OF NEW YORK.

BY OSCAR W. RIGGS, IN FRANK LESLIE'S MONTHLY.

The metropolis which in this New World has well been called the Giant Mother of Commerce, has a thousand industries in her care, but none more important than the grain trade, with its great steamers, its white-winged ships, its long flotillas of barges and canal boats, its bustling wharves, its vast warehouses, and the swarming and multitudinous life in a hundred avenues of traffic. Here we see commerce evolved from primitive barter to the complexity, yet the precision, of a science; here is a phase, and no unimportant one, of the mysterious evolution by which human society is rising to a higher level—from the rude and simple to the varied and complex; from the barbarous methods of the past toward a beneficent consummation in ages yet to come. Apart from this, it is certainly one of the strangest of the strange occurrences in this so-called prosaic world that the cereal which we know by the name of wheat, once an unprofitable grass growing wild on the shores of the Mediterranean, should to-day be the food of millions, supporting vast populations; filling treasuries, building towns, schools, libraries, palaces; bringing the down-trodden masses of Europe to this home of the oppressed; and, in a word, as with a magic equal to any of the wonders in a Persian tale, spreading wealth, comfort, ease,

and in large tracts of the planet aiding very materially in the extension of human civilization. Indian corn, still growing wild in the forests of Paraguay, and first seen by Europeans on the discovery of this continent, has likewise done much to develop the resources

18,167,287 bushels of oats, and a considerable quantity of other cereals, not to mention arrivals of no less than 5,988,855 barrels of flour. The exports were 28,486,369 bushels of wheat, 11,698,526 bushels of corn, 4,846,088 bushels of rye, and 3,865,048 barrels of flour. The rail



A NEW YORK GRAIN ELEVATOR FROM THE STREET.

of this country especially, while it has also no small influence, directly or indirectly, on the industrial life of Europe.

New York has naturally benefited very largely by the commerce in cereals, but even commerce is in some sense a battle, and she has only retained her prestige at the cost of the utmost vigilance and of determined efforts in resisting the encroachments of rival cities. She has always succeeded, however, in flinging off these business foes, and to-day at least 62 per cent. of the trade takes place at New York. The receipts here last year were: 36,864,761 bushels of wheat, 19,488,523 bushels of corn,

roads bring about 70 per cent. of the grain that comes to New York, and the canals and the rivers bring most of the remainder. The great trains of freight-cars come rattling and hooting down the Hudson to this city, or across the New Jersey marshes into Hoboken and Jersey City, at all hours of the day and night in the active season. Most of the trade is on the New York Central, the Erie, and the Pennsylvania Roads, and in a single day, even early in the spring, they have brought in altogether over 300 cars filled with cereals. A car holds 450 bushels of wheat, or 500 bushels of corn, rye or barley, or 800 bushels of oats. Some of the wheat formerly received here was adulterated with that of an inferior grade by dishonest shippers at the West. It was carried loose in the cars, and the trickster who wished to deceive buyers by an appearance of uniformity in the quality of the wheat put in a poorer grade at the bottom of the car or along the sides, or else distributed a number of bags of the inferior wheat on the floor of the car with their mouths downward, and when the car was filled up to the level of the bags these were pulled out, leaving a column of poor grain here and there. Often, too, the trick was repeated when another layer of the height of



a standing bag had been laid on. This is one of the most ingenious methods for swindling yet devised in the grain trade; so ingenious, indeed, that even the Western inspectors, whose duties have been rendered more arduous thereby, have been fain to express their respect and admiration for it as one not easy to detect, since the testing instrument, somewhat resembling a sand-pump, is much less apt to reveal the fraud in this case than when other methods of deception are practiced. When poor wheat is detected in the car its entire contents are classed as poor according to the inspection rates; this fact makes the dishonest shipper exceedingly careful in his methods of swindling.

Much of the red wheat which at one time arrived here, however, was fraudulently graded either at Western points or at New York. The wheat is all collected into elevators and graded according to fixed standards of quality by regularly appointed inspectors here and at the West. That which is termed "No. 2" red wheat is usually sold in large quantities for export; much of the so-called "No. 2," at one time sold here, however, was of a lower grade, and this fact drove some of the foreign trade to Baltimore, where the grading was more strict; though exporters here have been known to purchase the inferior grade and mix it with the genuine, just as a year or so ago utterly worthless weevil-eaten wheat was mixed with that of sound quality and sent abroad as good enough for foreigners.

Twenty-eight per cent. of the receipts here last year came by way of the Erie Canal. In 1880, when the season of navigation was unusually long, and the harvests were particularly bountiful, no less than 69,000,000 bushels came through the canal and down the Hudson to this city.

The great waterway which extends from Buffalo to Albany, a distance of 363 miles, and which connects Lake Erie with the Hudson River, averages 70 feet in width, 7 feet in depth, cost \$7,602,000, and was completed in 1825. The famous Suez Canal is much wider, being 325 feet from bank to bank, except where it runs through high ground; but it is only 100 miles long, and for twenty-five miles of this distance it passes through lakes. There are no tolls on the Erie Canal now, and the trade is slowly increasing.

The number of boats on the canals of this state has been estimated at 5,000 and even more, most of which are on the Erie Canal and trade with this city. They are not all actively employed, however; the competition by the railroads and the rivalry of other cities have at times greatly reduced the number actually in service. Time is everything in our bustling land, and the boats on the canal are too slow, the average rate of towage being only four miles an hour. Ten years ago the New York Legislature offered an award of \$100,000 for an invention which should secure steam navigation on the canals without injuring the banks by wash from the boats, and several patentees have received a portion of the sum named. There are now about 200 steam canal boats on the different waterways, and they come from Buffalo to New York in six days; the old-fashioned boats take from ten to twelve days. The merchants of New York and Buffalo now want the width of the Erie Canal materially increased, perhaps doubled in order to compete with other cities by means of larger craft propelled by steam. Said a prosperous canal boat owner: "The boats that are now towed by horses and mules are not quite 18 feet wide and are only 98 feet long. We want more boats driven by steam, and they should be at least 115 feet long, and 20 feet wide. We could carry then 16,000 bushels of wheat in each boat, or double the quantity now carried in the old-fashioned boats, and we should then have a better chance against the railroads. New York would benefit by the change, because a greater check could be kept on the railroads as regards freight rates."

On the Chinese canals, it may here be added, the boats are towed by men, but steam is quite extensively employed in Europe, and it seems unlikely that the United States will long remain behind the age.

At the opening of navigation in April, fleets of propellers and sailing craft leave the great lake ports from Chicago all along through the grain region contiguous to the inland seas and a large proportion of this shipping goes to Buffalo, a city that, through the trade of the Erie Canal, which here begins, has risen from a population of 8,653 in 1830 to one of 150,000 at the present day. At Buffalo the grain is transferred to canal boats going Eastward. Arriving at Albany the boats are formed into fleets, and are then towed down the Hudson to this

city, at a charge of \$25 for each boat. Here there is a charge of 50 cents a day for wharf rent; or, when the boats are laid up over winter at Brooklyn or Jersey City docks, \$10 for the season.

The great tows constantly coming down the Hudson in the active season are an interesting sight. Sometimes a steam canal boat, stationed in the rear of a number of the ordinary boats, will push them all the way down from Albany, after they have of course been properly secured together; but usually they are towed down by regular steamers in the ordinary way. One company has a monopoly of the business of towing between Albany and New York, and two powerful steamers especially adapted to the trade leave the former city daily, while others are constantly returning with empty boats. Sometimes eighteen steamers are engaged in the trade. Generally they bring twenty-five or thirty boats at a time, each carrying 8,000 bushels of wheat, or 8,800 bushels of corn, or 10,000 bushels of barley, as it may happen. They are from thirty to forty-five hours coming from Albany to New York, a distance of 145 miles. Usually the tow arrives in safety, but sometimes, in a storm on the river, among the mountains renowned in Washington Irving's vivid tales, an obstinate boat suddenly breaks away and perhaps sinks. This mishap sends the fleet helter-skelter over the river, and while the ghosts of Hendrick Hudson's crew are perhaps rolling tenpins up in the black mountains by the light of occasional gleams from the pitchy sky, the crew of the modern steamer far below on the white-capped river are hurrying here and there, with anything but Dutch phlegm and good-humor, in their work of getting the boats in line again.

The largest tow ever brought here from Albany arrived one day in the fall of 1880, and consisted of 103 boats. They came down the broad river six abreast, and the procession—counting the steamer, 250 feet long, the hawser, of 600 feet, and the canal boats, each 98 feet in length—stretched out nearly half a mile. As they swung around the Battery to the docks on the East River it was a sight well worth seeing.

In prosperous times 50,000 men are employed directly or indirectly by the canals of this state, but comparatively little is known of canal boat life, except in some of the villages and larger towns of the interior. It is far from uninteresting, however, to any one who cares to know how any portion of the human race conforms to the natural law that each individual shall fight his way to his own loaf. A large proportion of the trade is in carrying grain to this gateway of the commerce of the continent. The boats in many instances are owned by persons who hire crews to manage them. The "captain" receives usually \$150 per month, with which he pays himself and boards his five men; these receive from \$15 to \$25 each per month. In the main it is an easy life, and the men accordingly enjoy it. None of them expect to rise from the canal to the White House, as James A. Garfield did, any more than the Mississippi flatboatmen of the old days would have expected to follow Abraham Lincoln, their former companion, along the thorny path that leads to the same exalted station; but they enjoy their existence, as many certainly do not in the turmoil and rush of crowded cities. In the winter they remain in villages of the interior, enlivened in a measure by the usual balls and parties, by "corn-huskings" and "apple-parings," and other giddy amusements incident to the season. Or, if proof against this luxurious mode of life, and eager to accumulate this world's goods, they obtain employment at New York, generally on the lighters engaged in carrying merchandise here and there in the harbor.

In many cases, however, the boats which we see at the city wharves are owned by the "captain." The more well-to-do owners return to their homes at the close of the season; others live in their boats all the year round. The latter form a little world of themselves in their strange migratory existence on board these humble boats, that ordinarily attract so little notice. In the winter hundreds of them are towed over to wharves at Jersey City, to the Atlantic docks or the Erie Basin in Brooklyn. The "captain" then sends his children to some one of the public schools, and he himself settles down for as comfortable a sojourn as possible on his boat, until returning spring sends him up the Hudson again on a long tow, in quest of grain to bring back to the city.

At the foot of Coenties Slip, on the East River, the docks are always crowded with canal boats during the summer, and here they remain until the cargoes are sold; then they are towed to the elevators and unloaded

To board one of these boats, or even to walk along the wharves where they gather, seems not unlike a sudden transportation from the bustling city to the widely different scenes of the country. Here is heard the quaint and not disagreeable enunciation of the interior, and here one sees its easy costumes; the collar becomes a superfluity, and enormous boots are apt to squeak, like those of the traditional sexton in the village church. These boats have each a large hold for the grain, a good-sized stall for one or two horses, which are brought on board when no longer needed on the tow-path, and the crew have a cabin forward. The cabin of the "captain" and his family is aft, and is often well furnished. Some of them, indeed, have cabinet organs, and the little sleeping apartment frequently boasts a Brussels carpet. The cabin is perhaps thirteen feet wide by only fourteen or fifteen feet long; but it is astonishing how much is made of this space; the thrifty wife could scarcely be in more cosy quarters under the circumstances. Two of these boats were visited, and the cabins were very courteously shown, in one case by the stout, brown-visaged "captain" and his neatly-dressed wife, and in another by a comely lady in black. Both boats had many of the conveniences or luxuries of the ordinary household; a cheerful clock ticked on the wall, canaries sang in bright cages; a neat, good-sized kitchen-range stood in one corner, and there were cupboards, all the usual culinary utensils, a refrigerator, clothing-presses, a table with newspapers, not to mention pictures and imitation deer heads on the walls, vases of flowers in the windows, and a bunch of white, sweet-scented clover over the door. The cabin is composed of three tiny compartments, of which one is a "sitting-room" and kitchen combined; two sleeping apartments are secured by means of folding doors ingeniously contrived; lace curtains adorn some of the couches; and, in fact, there is a surprising degree of convenience and comfort where it would be least expected.

Howells, in one of his humorous flights of fancy, which contribute so much to his charm as a novelist, says of a boat on the Erie Canal: "She is succinctly manned by the 'captain,' the driver, and the cook, a fiery-haired lady of imperfect temper; and the cabin, which we explore, is plainly furnished with a cookstove and a flask of whisky. Nothing but profane language is allowed on board; and so, in a life of wicked jollity and ease we glide imperceptibly down the canal, untroubled by the far-off future of arrival." The novelist, however, would scarcely care to have this amusing flight taken too seriously, especially by those to whom it might fairly apply. Let it suffice to add that the prejudice against canal life which once existed in the interior of this state has now greatly diminished, and that the population engaged in the trade on our artificial waterways is, as a rule, a worthy one.

The boats formerly cost from \$4,500 to \$4,800 each; now, however, they can be built for \$3,000 or \$3,500. The owner receives four cents a bushel for bringing grain from Buffalo to New York. "Twenty years ago we received twenty-eight cents per bushel for the same work," said a grizzled-bearded canalman, sitting in his shirt-sleeve under the awning on his boat, "but there are too many boats in the trade now. There are 2,700 on the Erie Canal alone, and something like 2,000 on the Champlain. The competition among so many boats hurts the business. The present rates of freight pay little or nothing to a good many of us. Yes, times were better five or six years ago, too; then we earned all the way from \$200 up to \$1,500 in a season of about eight months." The speaker mopped his face with a huge red bandana, and proceeded: "A few companies own canal boats, but two-thirds of them are owned by men like myself. Some men own a dozen. Steam canal boats would be a big thing for this state, if there were more of them. They have cost too much for coal until lately; some burn from twenty-five to thirty tons during the trip from Buffalo to New York, but a newly patented boat only burns fourteen tons during that time; and the problem, how to compete more successfully with the railroads, would be solved, probably, if the Erie Canal should be widened."

But the great elevators at this port are one of the most important features of its commerce in grain. There are at least two here that are not equaled in point of size and working capacity anywhere in the world, not even at Chicago. In all, there are twenty-two stationary and thirty-four floating elevators here; the stationary have a storage capacity of no less than 24,275,000 bushels, and if all were set to work they could transfer over 240,000



bushels in a single hour. The New York Central elevator, at the foot of Sixtieth street, North River, has room for 2,300,000 bushels, and might transfer to a vessel 60,000 bushels in an hour. The Erie and Pennsylvania Railroad elevators at Jersey City, though not so large, are noteworthy, as are also many in Brooklyn at the Erie Basin, Atlantic Docks and elsewhere; most of the large stationary elevators, in fact, being in Brooklyn, which, not being a port of entry, is commercially a part of New York. The floating elevators, though the most numerous, are much smaller than the stationary, not being able to transfer more than 8,000 bushels in an hour, but collectively they are an important item in the trade, and perform work in a single hour that once would have taken at least two days. The first large elevators were

## GRAIN; ITS STOWAGE, STORAGE, AND PRESERVATION.

[Continued from Pages 5, 6, and 7 of last issue.]

A due knowledge of the seasons of shipment of grain is of the utmost consequence. Generally speaking, grain may be shipped across the ocean all the year round, yet the quantity must be governed to a certain extent by the season of the harvest, and the amount produced. The two principal governing causes which control shipments are the closing of certain ports by ice in the winter and the state of the markets.

The ports of Quebec and Montreal are open from May to the end of October, and in New York, Boston, Baltimore, and New Orleans shipments can be made all the

ure in all new grain, unless it be the produce of an exceedingly dry climate; this moisture is not apparent, or sufficient to cause damage during short voyages; the exterior may appear perfectly dry, but on putting some in the mouth a degree of toughness and meanness apparent.

One of the most frequent causes of dispute between masters of vessels and consignees is the difference of quantity between that stated on the bill of lading and that delivered, and the difficulty is increased through the uncertainty of the cause. In the first place, the weight of grain is not uniform in all parts, and it varies with the seasons; next, there may be a discrepancy in the weights or measures, but the principal source of dispute is the difference of bulk by leakage or fermentation, which may occur from deficient dryness before shipment,



A GRAIN ELEVATOR RECEIVING WHEAT FROM THE WEST.

built here about twenty-two years ago; previous to that the work of unloading the boats was done by hand, and to take out 4,000 bushels was a full day's labor. "We used to shovel the grain into bags, and a squad of men carried it into the warehouse," said a veteran in the trade, "but to take out 4,000 bushels in a day required sharp, steady work, as well as what was then something of a phenomenon—a sober stevedore, or overseer for the men. Little is now thought of doing four or five times that amount of labor in a day with the great elevators."

[TO BE CONTINUED.]

The wheat crop of Minnesota is represented to have suffered 10 per cent. by storms; but in Dakota the harvest is turning out well. The statistical agent for Nebraska states that the crop exceeds previous estimates and places the total at 16,000,000 bushels. The Washington department thinks the yield in Nebraska will reach 19,000,000 bushels.

year round. In Australia summer extends from December 1 to January 31, and the autumn is in March, April, and May. On the plains of South Australia the harvest commences in November, but in the hilly districts not until December or the beginning of January. In Tasmania summer commences about November, autumn in February, winter in May. The wheat harvest on the west coast of South America is in February, and the principal shipping ports are all south of Valparaiso.

Fermentation and heating of grain cargoes, however long the voyage, will never take place without the presence of moisture. There is always a dampness about the hold of a vessel which, in time, will have some effect in producing damage, which rapidly increases after it has once commenced. When fermentation does commence, and a portion of the cargo commences to heat, ventilation should be resorted to at once, as the grains above commence to sweat, and in a very short time the whole cargo will be in a lively state of fermentation. It may be inferred, also, that there is considerable moist-

natural fermentation on board, or that created by the unsuitableness of the ship.

Increase of measure, generally, is caused more by the roughness of the grain, which prevents it from fitting so closely in the measure, than by actual increase in bulk of the grain itself; therefore a damaged or heated cargo may have settled in a hold when sound, and although apparently the vessel be not full on arrival, yet in measuring out the cargo it may be found increased in measure, according to the nature of the grain, and the damages sustained, from three to seven per cent., or even more; so that the cargo could not be put in the same vessel again, unless brought back to its original good condition and weight per bushel, when it would be found to have decreased from three to five per cent. in quantity, or even more, but the portions of a cargo which become actually wet will, on kiln-drying, decrease in proportion of four to three (25 per cent.), or occasionally a greater loss will be shown in quantity.

Freight is generally paid according to charter party;



the remedy for improper stowage or neglect is against the master and owner by action. Where a master informs a merchant that a cargo of wheat was half damaged, and the merchant refuses to pay freight without deducting half freight for the damaged part, it has been decided in the British courts the law of the case in the absence of the charter party bearing on the question, that any claim for deduction of freight on account of damaged cargo, must depend on the manner in which it became damaged, whether through any default on the part of the ship or neglect of the master. Under any circumstances, however, the merchant has no right to deduct what he considers proper from the freight, although it is often done upon plea of custom or usage at the port; but before this plea can be received as a valid one the custom must be proved, and shown to be one within whose compass the shipper can be included. The best course for a master to adopt is to receive, under protest, the proportion of the freight offered, and after proving, by means of a survey, that the ship is not liable for the damage or for the deduction made from the freight, proceed against the merchant for the remainder.

Some charter parties have the following: "It is further agreed that should the cargo consist of wheat, seed, or any other kind of grain, in the event of the cargo, or any part thereof, being delivered in a damaged condition, the freight shall be payable on the invoice quantity taken on board, as per bills of lading, or half freight upon the damaged portion, at the captain's option, provided that no part of the cargo be thrown overboard, or otherwise disposed of on the voyage. Charter parties generally contain a clause to this effect: "That after true and faithful delivery (all and every the dangers and accidents of seas, lakes, rivers, and navigation always excepted), freight shall be paid at the rate of —." Some merchants allege that masters and owners are always ready to avail of this exceptional clause to protect themselves if the cargoes be damaged or some be thrown overboard on the passage, but they nearly always endeavor to obtain freight for the quantity delivered, although that quantity may be increased by an accident incidental to the voyage, and therefore excepted by the charter party. On the subject generally of bills of lading, a merchant observes that the law is not very satisfactory as to the security in such documents to the holders, for serious deficiency of quantity often occurs, and may be in part attributed to the masters and mates being less careful than they should be in examining weights and keeping an account of the shipments. When a deficiency arises the master refuses to pay for it out of freight, yet the owner or consignee actually pays for the alleged quantity as by bill of lading, as it is on the faith of that document, as on a bill of exchange, that the money is advanced. In some cases masters try to evade the responsibility by signing "Weight unknown" at foot of bill of lading. This does not even meet the case, for the bill of lading represents a certain quantity, and for that quantity the purchaser or consignee advances the amount stipulated. If the bill of lading be transferred through various hands and purchasers several times before the arrival and discharge of the cargo, the difficulty of trying back is great, and no redress may be had. The law regarding bills of lading is not so clear as it should be on these points.

Wheat is occasionally purchased by weight, as so many pounds to the bushel. Merchants sometimes allow a half per cent. for decrease in weight, but this is only from a few ports along the Mediterranean and the Bay of Biscay. It is very advisable that merchants would not sign for both weight and measure; and when masters sign for weight they should insist on shippers putting on board the weight per bushel signed for, and refuse all of a less weight. When discharging some ports it is the practice for laborers in the hold to tuck their pants up to their knees; instances have occurred where grain has been concealed in the folds, and considerable quantities have been thus purloined from the cargo and carried ashore.

Many masters of vessels, in order to prevent cargo from shifting, have suitable bulkheads and shifting-boards, perfectly dry, well stanchioned off the side, and well plated with good cleats to keep them from working out. Care should be taken to fill up the deck between the beams, for a hold filled on leaving port will sometimes be found, through settling, only seven-eighths full on reaching its destination; this will show the necessity of particular attention to the above. If the upper part of the cargo is in bags the chance of shifting

will be decreased; barrels of grain will work through the keelson if the cargo is not well fixed with old sails, etc.

An action was brought in a British court in Cork, Ireland, by a merchant against the owner of a ship, to recover compensation for injury sustained in the purchase of a cargo of grain, which was damaged in consequence of negligence and want of proper skill and care. The ship was chartered in London in the month of June. The agreement between the owner of the ship and an agent of the merchant was to convey a cargo. She was represented to be copper-bottomed, of the capacity of 1,900 quarters, or 15,200 bushels, strong and tight. She was to bring, either from Galatz or Ibrail, a cargo of maize, and to call at Falmouth or Cork for orders, and carry it from either port to where desired. The owner undertook, for £15, to provide proper dunnage. He arrived about the middle of July at Galatz, where his ship was loaded. The bill of lading stated that he received the cargo in good order and condition, and he engaged to deliver it so with the general exceptions which are in every bill of lading. The counsel in the case drew attention to the fact that the master was to make for the nearest port. She arrived in Queenstown October 21. The merchant treated for the cargo, but having heard that it was slightly damaged, he sent his foreman to examine it. When the hatches were opened a discoloration was perceptible, as if the sea had forced its way in there. In prosecuting his examination he drove an instrument called a piercer into the grain. He drove it obliquely and down straight, and when driving it the latter way came on a hard substance, as if he had reached the bottom. It was reported to the merchant that all that was the matter with the cargo was that there was ten tons burned and twenty tons slightly heated. The captain assured him that it was sound, with the exception of the thirty tons, and in consequence of this injury he was allowed a shilling reduction on the quarter. The merchant paid for the cargo £3,335, less £85 commission, and the master of the vessel was paid 10s. per quarter for freight, which amounted to £968, and £15 for dunnage. The merchant then, as was his right, ordered the captain to take the ship to Alloa, but offered to allow a reduction in his freight to discharge at Cork, which was agreed to. The foreman, when making his examination, was assured by the mate that the voyage was a good one. When they got down in the unloading of the cargo a certain depth they came to a kind of a floor three feet from the bottom as hard as asphalt.

This floor turned out to be what the foreman met in piercing. It had to be dug out with iron shovels, and was unfit for human food. A survey of the ship was made by the harbor master, and part of his report said that there were three feet of water over the hold in the keelson, and no other dunnage at either side of the pump well, but some matting which was found to be rotten, and if the vessel had been perfectly dunnaged, there would have been much less damage. The master when asked, admitted that he encountered some very severe weather, and that the pumps got choked. This was in contradiction of the mate, who said they had very fair weather. Having encountered bad weather, it was his duty, according to the charter, to make the nearest port, and either unship the cargo or provide for its safety in some other way, but he came on a month's voyage at that time, and entirely at the peril of the cargo, and when dealing with the merchant, whose loss was £461.13, he said nothing about the pumps being choked. The merchant kept back £340 from the freight, and the captain brought an action for its recovery. There was no denial that this was due, but then how was the merchant to be recompensed for the loss sustained in the injury of the grain? The matter was settled thus: The merchant lodged the amount in the care of the court, and then brought an action for damages. The question of the jury was a simple one, whether the cargo had been damaged by want of proper care on the part of the defendant. They gave a verdict for the plaintiff for the amount of his damages.

Owners are not entitled to the freight caused by increased bulk from the effects of sea water beyond the measure at the port of shipment, as the following judgment of the Court of Exchequer, of England, being made absolute, will show: This was an action to recover £44.11.5, a balance held to be due for the freight of a cargo of wheat. By a memorandum in the bill of lading the quantity and quality were declared to be unknown to the master. The provision in the charter party as to the freight was, that it was to be according to London

printed rates. At Gloucester the wheat was made to be 3,782 quarters by custom house measure; the plaintiff claimed freight on that amount. Defendant tendered 2,664 quarters, specified in the bill of lading. Freight was paid on that quantity, and an action was brought for the larger quantity. At the trial the jury found as a fact that at Odessa, from whence the grain was shipped, it would have measured only 2,664 quarters, but there was no evidence whether the increased bulk arose from its bad condition when shipped, from the heat almost necessarily arising in a cargo on so long a voyage from shipment of water by peril of the sea, excepted against in the bill of lading, or from bad and defective stowage, or careless or negligent conduct of the master and crew on the voyage. A verdict was entered for plaintiff, leave being given defendant to move to enter a non suit.

Mr. Baron Martin said: "It was agreed that the bulk which was delivered beyond the bulk shipped was water not wheat; but there was no evidence that any water came in contact with the wheat, and I believe there are causes which increase the size of grain other than contact with water. However this may be, in my judgment the measure for the purpose of freight, wherever made, ought to be of the grains of wheat as they actually exist. The valuable part of the grain is that which produces flour; but in the grain there is a husk, and I believe always a certain quantity of moisture or water, which can only be removed by the kiln or artificial drying, and this argument, if well founded, would equally exclude the moisture at Odessa, for there can be no doubt that a certain quantity of damp or moisture was in combination in the grains of wheat, and to some extent increased its bulk. It is clear, according to the general law, that the circumstance of the wheat being damaged does not at all affect the right of the plaintiff to freight. It has been decided that when the entire quantity was delivered the ship owner was entitled to the full freight, notwithstanding it was proved that the goods conveyed had been damaged by the crew, and that the remedy was by a cross action. It may have arisen from the bad and defective quality of the wheat when shipped. The captain expressly declared himself to be innocent of its quality and declined all responsibility on this head. The wheat, as was proved at the trial, was shipped while the vessel was in quarantine in an open roadstead, out of barges; and it is notorious that in many foreign parts this is the usual mode. Under such circumstances it is practically impossible to measure a cargo of grain; there is neither time nor, generally speaking, a sufficient number of men competent to do it. I am quite aware that this rule would hold out a temptation to ship-masters to wet such cargoes and thereby increase their bulk, but this would be a most dishonest act, and subject them to an action for damages. In my opinion the plaintiff is entitled to judgment, and the rule ought to be discharged."

Mr. Baron Platt: "It seems to me the rule ought to be made absolute, and that it was the duty of the master to ascertain, at the time of loading, the quantity he received; the difficulty seems imaginary, as it can hardly be supposed that the number of cubic feet that his vessel could stow away could be unknown to him. Inasmuch as 2,664 quarters alone were shipped, they alone have been carried the whole voyage; for them freight is payable."

Mr. Baron Anderson: "This case is closely analogous to that of the pregnant females in Mallay, page 156, where no freight is payable for infants delivered on the voyage; also where freight is contracted for the transport of animals, the freight is payable only for those which arrive alive; and again, where goods such as sugar and molasses have been wasted in bulk during the voyage, the freight is payable for the amount which arrives."

The Lord Chief Baron: "I agree with that the bulk, or weight, as taken at the port of destination may be *prima facie* the criterion of the freight to be paid, but when it is proved, and found by the jury that that test is fallacious and untrue, and that the real quantity shipped was a different and smaller quantity, then I think the freight ought to be calculated on the true quantity shipped; the captain's ignorance of the true quantity as expressed in the bill of lading cannot entitle him to charge freight according to a false estimate. In case of a cargo of sponge shipped dry, to be paid for by weight, the consignee might certainly squeeze out all the water imbibed, if any, and pay for the sponge only. If it can be accurately known and ascertained what ought to be separated, though the separation cannot in fact be made



It is known what ought to be deducted from the claim of freight, and the deduction, which is impossible, ought to be made. Here the measure of the wheat shipped was known, is proved and found by the jury. I think, therefore, that the freight for this increased bulk cannot be claimed under the bill of lading rule made absolute. Several other cases could be cited, but the ones mentioned will suffice for the present purpose. In the case of deficiency in a cargo, a case in point, is a ship that was chartered at Nantes for a port in Ireland, the cargo to be shipped as customary, and the master to take on account of it and sign bills of lading accordingly, the freight to be paid at 11s. per ton of 15 hectolitres. The cargo was shipped, the quantity being per bill of lading 2,087 hectolitres wheat, weighing 165,766 kilogrammes, and the vessel in due time arrived at her destination and delivered 750 quarters, or 2,181 9-11 hectolitres of  $2\frac{3}{4}$  bushels per hectolitre, on which freight for 145 6 15 tons is demanded, but the merchant declined paying for more than was expressed in the bill of lading. Alleging that the ship has delivered some ten or twelve hundred short of the weight shipped, which the master does not dispute, as he protested at Nantes against the weight as shipped, and noted same on bills of lading. The answer is: The master having noted protest at port of shipment against the correctness of the quantity named in the bill of lading, should have withheld the delivery at the port of destination until security was given for payment of freight on the quantity delivered, in good order and condition. In the case of a surplus cargo, bills of lading are signed at Marseilles for 3,352 charges, of 160 litres, equal to 1,843 imperial quarters. At Liverpool the cargo turned out 2,033 quarters. Plaintiff contended that in the first place the master was bound by the bills of lading and that the quantity stated thereon was, at all events between him and an endorsee, all on which he was entitled to freight. In delivering judgment the court said: "I know no authority for giving such effect to a bill of lading, even without the memorandum here appended—not accountable for quality, quantity or measure"—if the master has carried a larger quantity than signed for, he is as much entitled to freight for the surplus as if he had carried a larger amount of barrels or bags than stated in the bill of lading. But it was further urged that the increase in the number of quarters had occurred by heating during the voyage, and that, therefore, freight could only be demanded on the smaller quantity as being all received, carried and delivered, and that all these things must occur to entitle him to freight. There is no direct proof of the quantity shipped unless the bill of lading is to be looked on as such, but I am satisfied it is incorrect. I cannot conceive that a cargo could have increased by heating from 1,843 to 2,033; that is 190 quarters (1,520 bushels) when the witnesses for the defense do not speak of ever having known such a cargo to have increased by more than 100 quarters, and according to their evidence the cargo which it is admitted sustained no damage from any defect in the ship, had, in all probability, been already heated on the way, and had been put on board without being sufficiently dried. I have also the evidence of the captain that the cargo entirely filled the vessel on leaving Marseilles, and that it had sunk from nine inches to a foot before arrival. It is quite clear that the bulk had not increased after leaving Marseilles by any neglect or malversation on his part, or any defect in the ship, and I am satisfied if it increased to any extent on the voyage, it did not increase to anything like the extent of 190 quarters, and that in point of fact, a larger quantity was shipped than that mentioned in the bill of lading. Whether this is to be attributed, as alleged, to a miscalculation to the number of charges to the imperial quarter, I do not stop to inquire; nor, in the view I take of the case, is it necessary to ascertain the precise quantity shipped, inasmuch as I think the freight is to be calculated upon the quantity ascertained on her discharge. The master in taking his cargo in bulk would have no mode of testing the accuracy of the bills of lading, except by a very rough estimate of his vessel's capacity." Verdict was accordingly entered for plaintiff. This decision gave much dissatisfaction to the trade, who observe that the judge decided on the ground of a supposed error in the quantity shipped, and not on the ground of the ship-owner's being entitled to

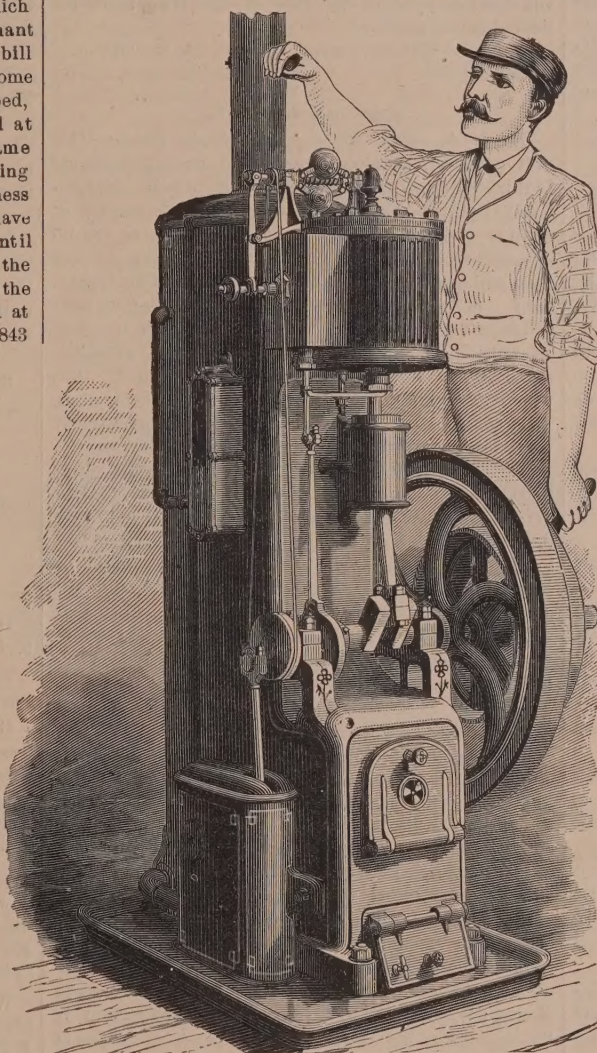
freight on any increase in the quantity during the voyage.

[TO BE CONTINUED.]

### THE DAVEY SAFETY ENGINE OR VACUUM MOTOR.

An engine practically adapted to branches of industry where a small, cheap and positively safe power is required, is illustrated herewith. It is the invention of Henry Davey, an English mechanical engineer, and is built in this country by Chas. P. Willard & Co., of Chicago, Ill. Mr. Davey is also the inventor of the Differential Pumping Engine, extensively used in the public water works and mines of Great Britain, and to some extent in America.

The motor here shown differs from an ordinary steam



THE DAVEY SAFETY ENGINE.

engine in the fact that while a small quantity of steam is made in the generator, which is a part of the machine, steam is not the motive power employed to do the work. Only as much is made in the smaller sizes as would be generated in a large tea-kettle, and this at only atmospheric pressure—the same pressure at which it would flow from the spout of a tea-kettle. The steam has, in fact, no other function than to create, by condensation, a vacuum, which is the motive power. The condensation of the steam is effected by a surface condenser, which is kept cool by water. Where the engine is to be used in a city or town having a public water service, the condenser is placed in the upright iron pocket at the back of the engine, and a stream of water—one-eighth inch pipe for one-horse, one-fourth for two-horse, and one-half for four-horse power—constitutes an abundant supply to keep the condenser cool. The water is admitted at the bottom and rises to the top, passing off through an overflow pipe. In localities having no running water the condenser is placed in a wooden tank conveniently located within a few feet of the engine, and connection made by means of pipes. This tank being once filled, there is no consumption of water except the amount that flows out of it to supply the generator. The quantity

thus consumed is but a trifle over three gallons per horse-power per hour. It is evaporated in the generator, condensed and discharged in the form of distilled water from a small pipe at the side of the engine. If desirable, it may be returned to the tank after becoming cool, and thus be repeatedly used, in which case one filling of the tank will be sufficient for months.

The engine is double-acting, a vacuum being created alternately at each end of the cylinder. There is but little pressure in the generator, and therefore no danger of explosion under ordinary circumstances.

The cylinder is of bronze, with bronze piston-head and piston-rod, and requires no oiling, the low and very moist steam used being a sufficient lubricant. The bronze cylinder has the further advantage of being secure from rust. The quantity of water evaporated being less than half that consumed by an ordinary side-valve engine of the same power, and the temperature to which it is raised being but little over 212° instead of 300° to 340° as in an ordinary boiler, a very marked economy of fuel is the result. The pressure required, it will be observed, is only that necessary to overcome the friction in pipes and ports, in furnishing a sufficient supply of vapor to fill the cylinder. The precipitation of lime in the generator being in proportion to the amount of water evaporated, is correspondingly less than with an ordinary boiler and engine.

The water level is constant and unvarying, the feeding arrangement being automatic, and the danger rising in an ordinary boiler from failure of the water supply, is wholly avoided. The engine, in fact, requires no attention beyond simply keeping up the fire and giving the wheel two or three turns when ready to begin operations. Any description of fuel may be used which will go into the fire-box—either hard or soft coal, wood, coke or cobs; and by a proper arrangement of pipes in the fire-box, petroleum, naphtha or common gas may be used. As there is no pressure to deal with, the generator is made entirely of cast iron. The motor can be started in from ten to twenty minutes after lighting the fire. It is controlled by an ordinary engine governor, the speed varying with the supply of vapor to the cylinder.

### THE WEB-WORM.

The so-called web-worm, which, in June, 1880, was first discovered as a general crop destroyer in some of the central counties of Kansas, but has not been heard of since, last June suddenly appeared in the southeastern quarter of the state, creating general consternation among the farmers. The insect is the larva (or caterpillar) of a small moth of a light yellowish-brown color, belonging to the same family with the leaf-crumpler, the melon moth, and the meal moth. The larva itself is a slender, light green, black-dotted worm, about  $\frac{3}{8}$  of an inch long, having a quick, jerking mode of locomotion, when disturbed, and spinning a web over the leaves of the plants on which it feeds. Its natural food being wild plants and weeds, the insect overruns gardens and crops only, when it is unduly multiplied, so that its ordinary food becomes insufficient for the hungry host. The chief injuries, this season, in the thirty-five infested counties were inflicted on corn and potatoes; but only twenty out of the thirty-five have sustained serious damage, especially so to the corn crops, which, however, hardly exceeds 10 per cent. of the entire crop. Late-planted corn and potatoes in the bottom land have suffered most, so that early planting appears to be a safeguard against the plague. The worm can be destroyed by the application of London purple, thoroughly mixed with water, in the proportion of one pound of the purple to 100 gallons of water. This mixture may be applied to the insects by a common sprinkler, but would more effectually penetrate the webs and reach the worms if applied by means of a whisk broom or a force pump and suitable spray nozzle.

Kansas City Journal: "Crop croakers should bear in mind that the small wheat crop of 1881 brought more money to the farmers than either of the larger crops of the three succeeding years. The yield of 1,200,000,000 bushels of corn in 1883 returned more money to the producers than the 1,800,000,000 bushels of 1884."





[We invite correspondence from every one in any way interested in the grain trade, on all topics connected therewith. We wish to see a general exchange of opinion on all subjects which pertain to the interests of the trade at large, or any branch of it.]

#### NEBRASKA LETTER.

*Editor American Elevator and Grain Trade:*—A long time ago some one wrote, "A prophet is not without honor, save in his own country." Now, if you know of any seers who are looking for a location, whose characters are above reproach, they can add new luster to their names and replenish their consumptive wallets if they will give a correct forecast of the net amount of No. 2 wheat and oats in this state—one that we can bank on. "None others need apply."

Thirty days ago your correspondent wrote a very glowing account of the "immense crops of Nebraska." In fact, we had to word it that way, if we wrote at all. Since then old Sol has taken a hand in the glowing business, and easily laid your correspondent in the shade. In fact, we never before found the shade so desirable. Nebraska don't do anything by halves, as the record of the last few days of July will show. One could not help notice how frequent the quotations were from the revised version, when any person wished to express themselves politely, but emphatically, on the state of the weather.

We have been treated to all kinds of weather the past harvest, on the whole quite unfavorable for securing small grain in good shape, but just the thing to bring out the corn.

Wheat has been badly blighted, though, if one can believe reports, it is more local than general. A prominent mill man reports the wheat in Phelps and Kearney counties as first-class. Again, in the extreme southeast portion of the state come reports of fields yielding 25 to 30 bushels of good, bright wheat. Between these two districts is a wide territory, from which the most conflicting reports are coming in. We heard one prominent and extensive grain buyer put the damaged wheat at 20 per cent. of the crop, while still another equally well known buyer protests that it is fully one-third of the crop. Your correspondent would venture the *guess* that the first estimate is the more correct of the two.

The tremendous yield of oats will likely be cut down one-third to one-half. Most fields were lying almost flat when they were harvested, while farmers who cut their crop early are finding the shocks about ready to sprout with a second crop.

Barley is very badly discolored, and is giving the elevator men a great deal of trouble. A sample that had been put through a scourer twice was shown to the writer, but was still thought to be below grade.

It is a real pleasure to turn from the small grain and contemplate the growing corn, now in tassel, and earing out splendidly. You hear but one exclamation from passengers on the through trains from the Missouri River to North Platte or McCook. It beats the memory of "the oldest inhabitant." Nothing but hail and frost can possibly cheat us out of the corn crop. The acreage is fully 25 per cent. more than last year, while the stand is uniformly good the state over.

There is quite a good deal of activity in elevator building throughout the state. In the southeastern part P. S. Heacock is putting up a steam power house at Preston, and also at Schubert, while Jameson Bros. are guarding their territory by the erection of a house at Howes.

Probably the largest and most complete house built anywhere in the state is that of Davis & Brumback, at Beatrice, which was started up about the 21st of July.

New houses are also being built at Phillips, Thos. Cochrane & Co.; at Hoag, White & Leacock; at Friend, McKay & Connor; at Hubbell, Wirt & Deuell; at Bancroft, Crowell Grain and Lumber Co.; at West Point by parties whose names I cannot now recall; at Hanson, H. M. Oliver; at Garrison, Pardue & Johnson, and many others.

There was a movement on foot a short time ago look-

ing toward the erection of a 75,000 bushel house in Lincoln, but for lack of proper encouragement by the railroads it has fallen through.

The most interesting item that has come under your correspondent's observation in connection with elevator building and improvement was the move made by Jaeggi & Schubach, of Columbus. They picked up their elevator—a 10,000 to 12,000-bushel house—and loaded it bodily on flat-cars. After a trip around town it was set down some 600 feet from where it was formerly located, "right side up with care." They are now building a mill alongside of it, which they expect to have in operation in October.

If any elevator men are dissatisfied with their location and think the next town is "just the place," let them load up and go West, as described above. The next thing you will hear of will be, "Elevators built and equipped, shipped to any part of the West, ready for immediate occupancy."

Yours truly,

A. B. COLTON.

Lincoln, Neb.

#### KANSAS LETTER.

*Editor American Elevator and Grain Trade:*—The past month has developed nothing of great importance in this locality. Grain movements have been comparatively light, and the elevators have scarcely enough to do to keep the machinery from rusting. There are no new statistical facts in relation to the wheat crop, though I am still a believer in my former estimate of the Kansas crop. My opinion is based upon facts gathered here and there in my rounds through the state. It is not at all probable though that the official figures, so called, will give the state credit for 15,000,000 bushels. But whether they do or not, it will not be hard to determine, by the close of the crop year, about the quantity of wheat grown, and to that court I shall appeal my case.

The mills of Kansas have a capacity for grinding 20,000,000 bushels annually, and that is a low estimate too; 3,000,000 bushels will be required for seed and other purposes. And now, if 7,000,000 bushels, and that is a low figure at the present rate of shipment, should be shipped out through Kansas City, Atchison, St. Joe and other points, there will then be very strong evidence of at least 30,000,000 bushels in the state now, and which would also prove that there was 15,000,000 bushels of the late crop, or an enormous reserve of the old crop.

The quantity of wheat may be a vexed and unsolved problem, but there is now no question about the corn crop. That will be simply immense. Without a single doubt in my mind to-day, it will be the best ever grown in yield, and by far the largest acreage ever planted. Sedgwick Co., Kan., is already boasting a prospective crop of 9,000,000 bushels, claiming to be the banner corn county of the whole country, which she will undoubtedly be if she gathers what she expects.

In the great crop year of 1880 Nodaway Co., Mo., claimed to be the banner corn county, gathering in round numbers 6,000,000 bushels.

There is one beauty about this year's corn crop in Kansas; it is universally good. There is no section in the state where the corn can be considered bad. That is to say, no section adapted to corn raising.

The season has been the finest possible, very warm night and day, with rains at seasonable intervals.

Among grain and elevator men there is evidence of some life in the way of building and improving, and, in view of the large corn crop, I look for more as the season advances.

J. P. Campbell & Co., Kansas City, are pushing their new elevator forward with all the energy the extreme warm weather will permit, and will probably have it ready for receiving grain by the first of September.

Minter Bros., of Kansas City, are adding a new No. 3 Barnard's Elevator Separator so as to be in shape to take care of their share of the dirty wheat that is expected to come in this year.

The Capitol Elevator Co., at Topeka, are making commendable headway on their new 200,000-bushel house, and expect to have it completed early in the fall.

O. J. Martin is building a new elevator at Goddard, Kan., which he expects to have done in time for the new corn crop.

The proprietors of the "Zephyr Mills," Wichita, becoming weary of the uncertainties of flour-making in the old style, are converting their mill into an elevator, evidently feeling sure of getting their share of Sedgwick County's 9,000,000 bushels to handle.

Smith & Craig are building a new elevator at Randall,

and L. C. Vaughn is doing his best to plant a new one at Belleville. And so they go, here and there, all over the state. I think by another month many more can be reported.

Speaking about elevators reminds me of something that has been on my mind for some time. Many years ago now, in the columns of the AMERICAN MILLER, I made war on the main upright shafts in flour mills. It was then the almost universal practice to put main uprights in mills; to-day there can not be found a mill-builder of any note who would be caught putting a main upright in a mill.

The same evil did exist in elevators, but I thought it would die a natural death, without any effort to choke it down. But I find there are a class of elevator builders who have lived through all the ages of the past without learning anything, and still put main upright shafts in elevators. Now, if heavy main uprights are a nuisance in a flour mill, they are ten thousand times a nuisance in elevators.

The main upright in elevators must go; and I want to say to all grain men contemplating building elevators, that if they are approached by a would-be builder who even hints at putting in a main upright shaft, to dismiss him at once as a crank, a fit candidate for some benevolent institution designed for treating mild forms of lunacy.

In my last letter you make me say that E. E. Clark was building a new mill at Delphos. It is not a mill but an elevator. He had some notion of building a mill, but has, I think, entirely abandoned the idea for the time being, at least.

Yours truly,

ABERNATHEY.

Kansas City, Aug. 8.



Dickey & Pease, Racine, Wis., report a very good trade in their Giant Separator.

The Link-Belt Machinery Co., of this city, have been sending some machinery to Germany.

H. J. Deal, Bucyrus, Ohio, writes us that his grain tester is meeting with a very handsome sale.

The Frost Mfg. Co., Galesburg, Ill., write: "Our business is rushing, and we are running over-time." And their list of sales bears out what they say.

The Medart Patent Pulley Company say their Southern customers are buying "like fury"; half of their orders now come from the South. The Western and North-western trade, however, is very quiet, except at Chicago, Milwaukee, and St. Paul, at each of which it continues to improve.

W. D. Rinehart, of Terre Haute, Ind., is furnishing his steam shoveling machines as follows: Two sets to J. P. Campbell & Co., Kansas City, Mo.; three sets to McMorran & Co., Port Huron, Mich., and six of his patent Friction Clutches for a large distillery in St. Louis, and several others for electric light plants.

Some sixteen car-loads of boilers, aggregating 1,750 horse power, were recently shipped in a single consignment to Harrison, Havemeyer & Co., Philadelphia, Pa., by the Babcock & Wilcox Co., and constituted the eighth order from that firm, making a total of 5,760 horse power. Among the other shipments reported are a third order from the Solvay Process Co., of Syracuse, N. Y., for boilers aggregating 1,300 horse power, and a consignment to the state of Indiana of boilers of 1,200 total horse power for use in the insane asylums at Logansport, Richmond and Evansville. The latter contract amounted to \$30,000.—*Industrial World.*

Where machinery is used, the Drew Oil Cup will save 50 per cent. of the oil. Write for circular. Borden, Selleck & Co., Chicago, Ill.

New York parties bid 94 cents per bushel for 80,000 bushels of No. 2 Chicago spring wheat on board the schooner Golden Age, which is now on the Erie Canal. The actual cost of the grain laid down in New York is 96 cents, but with 2 cents rebate allowed by the elevator here, the shipper would just come out even.



## THE CENTRAL ELEVATOR AND WAREHOUSE, LOUISVILLE, KY.

The accompanying illustration shows a type of elevator differing in many points from that common in the Northwest. The Central Elevator and Warehouse, owned by Messrs. Callahan & Sons, is located at the corner of Fourteenth and Magazine streets, Louisville, Ky. It is a three-story brick building, 40 by 210 feet with a 12-foot basement, perfectly dry, and adapted to all kinds of storage. The house is built with separating floors, and has numerous windows, insuring the best ventilation for keeping grain, etc., in condition, and with the system of conveyors used, the establishment is well equipped for handling damp or heated grain.

A gas engine furnishes ample power for the large corn sheller, platform and bucket elevators, conveyors, etc. The house's facilities are ample for loading or unloading six cars at a time. In addition to the house scales there is a track scale which weighs the longest cars with such perfect satisfaction that the house's weights have become standard with the dealers. The gas engine and brick structure reduce the insurance to about a third the rate paid by ordinary elevators. The capacity of the building is 350 carloads.

The senior member of the firm of Callahan & Sons is an old, experienced miller, and over thirty years since he embarked in the feed and grocery business. The trade increased so that the firm were compelled to build on track; and after examining houses in Chicago, St. Louis and Peoria, they erected a building on their own plans and moved into their present quarters in September, 1881. Their house may be called a model one. The firm does a general storage and commission business, and deals in all kinds of feed, grain and flour, making a specialty of mill feed and hay.

### A GREAT GRAIN CENTER.

Though the crop of the present season of 1885 will not be equal in quantity to that of 1884, there will yet be a large surplus for export, much of which will first go into store, and the producer at this season naturally looks for the warehouse offering the most advantages for the final disposal of his crop. At Wheatport, on the Straits of Carquinez, are located the "Star Mills," wharf and warehouses, in the construction of which every point of advantage which long experience and good judgment could suggest were taken into consideration, and the result has proved the success of the enterprise. We find here "Starr's Mills," a solid brick structure, 148x184 feet, six stories in height, built upon concrete arches, the work of Mr. Ernest L. Ransome, and so constructed as to combine solidity and strength with a handsome appearance. This building is now approaching completion, and will soon be ready to receive the milling machinery, which will be of the latest and most approved kind which modern science can construct. The capacity will be 6,000 barrels per day. The greatest care has been taken to secure safety from fire, and on the roof is an immense tank holding 26,000 gallons of water, while on every story, and in each room, hose connection can be made instantaneously. Attached to the mill proper is an elevator similar to those in use in the East, where wheat is shipped in bulk. This building has twenty-six large bins for the reception of unsacked grain. The cleaning and smutting mill is another addition 37x85 feet, and contains the best of machinery for the cleaning of foul or smutty wheat. Leaving the mill for the large warehouse we find a building nearly 1,000 feet long by 230 feet wide, with a covered wharf running along its north side and west end, and where ships of the largest tonnage can load with perfect safety and at the lowest possible rate of expense, this alone making it a favorite loading point with consignees of vessels. A railroad track runs through the center of the building, and along the outside, thus affording equal facilities for shipping by land or water. Insurance on grain stored in this warehouse can be obtained at the lowest rates. Warehouse No. 2 is built upon piles, covers 200x400 feet, and will be used chiefly to store wheat intended for the mill. The many advantages offered to storers at this great grain center, very properly named Wheatport, must be patent to all, and insure a large and increasing patronage for the energy and enterprise which led to its construction. —San Francisco Journal of Commerce.

[For the AMERICAN ELEVATOR AND GRAIN TRADE.]

## THE GRAIN TRADE AND AMERICAN COMMERCE.

BY W. T. STACKPOLE.

If our people are ever to have a commerce such as they ought to seek, complete at home, world wide and beneficent abroad, it must be built up not on "brain spun webs of subtle sophistries," but on a plain, reasonable and practical knowledge of the physics of our own and other countries, and of their productions, their resources, their situation and their wants.

What profit has there been in the ages of vapid discussion of what some style "free trade," as compared with steam, electricity, steam navigation, the railway, the Suez Canal, etc.? And as it has been in the past, so is it now in the present; and so it will be in the future. Let us then leave the vain discussion of mere political theories, and seek for sound policies grounded on more material, tangible and practical things. These will be found concurrent with every one's best interests and duties. And thus on God's own preparation in nature and in the physics and needs of the world, the structure of American commerce can be safely and strongly built. And it should be on a National and Cosmic scale. And for this the preparation in all the past is ample and splendid, and far beyond the wisdom of our statesmen, or the currents of popular thought or current literature.

But let us attempt no general review or enumeration now in so wide a field. Let us, however, at present recur to the subject of the betterment of the grain trade by sound policies based on the requirements of our coun-



THE CENTRAL ELEVATOR AND WAREHOUSE, LOUISVILLE, KY.

try and the world, briefly touched upon in the July issue of the AMERICAN ELEVATOR AND GRAIN TRADE.

Of course it is very well known that in the world of our time it is the United States and Russia that produce the largest surplus of grain for export.

To the ancient world Egypt stood in that position for many centuries. That primacy seems to have begun with the seven years of abundance, followed by seven years of scarcity, before the beginning of secular history or of any knowledge on earth of letters, and yet described in the book of Genesis so clearly, so briefly and so sublimely. Through the rise and fall of empires and the change of dynasties that pre-eminence continued. It is recognized in all ancient Greek and Roman history, and can even be traced in the laws of Athens. The area of the Nile Valley seems small to us for such great and enduring power. But the production was very great in proportion to the area, owing to the large and varied yield of that wonderful garden of the East per acre, and to its return of two or more crops annually. These (of grain) could be stored in a superior manner, established at the time of the great epoch, and safely kept in that dry climate for years and years, thus making Egypt literally the granary of all that quarter of the world upon which commerce could safely depend. And doubtless the commercial wisdom of this was fully recognized in all Egyptian affairs in all times of apparent plethora or "over production." Our country and Russia have so recently advanced to the position of the greatest grain exporting countries of the modern world, that it is not strange that the fallacy of over-production should be slow in finding its refutation and its remedy. That refutation is not found in English policies, but in the whole history of mankind. For while there has everywhere in all ages been a variation in the supply from year to year, and an apparent plethora at times, yet all the teachings of all the ages seem to warrant the belief that it is only apparent, that it is always limited to particular

times and places, and that none is given to be wasted or squandered.

Vast schemes of gambling, whose effect would be to check or diminish production on the one hand, or too violently stimulate it on the other, certainly are not favorable to the best development of that great and complete commerce to which reference has been made, and on whose pathways we are now steadily advancing. That commerce if under the aegis of the truest policies, we are justified in believing will yet banish famine from the human race. To that end we should recognize the clearest and the greatest facts, as to demand and supply not only on a national but on a cosmic scale, and for a wider, truer and better commerce.

Clearly the safe keeping of a surplus is vital to the common welfare and safety, right in principle, and every way a sound policy in commerce. In the British Islands the climate is not favorable for storing and keeping grain. And instead of a surplus in any year there is now every year a vast deficiency in those islands. And if we look abroad over the world we will perceive by a little examination that in the modern world of our time there are but two countries where large bread supplies can be spared for export, and where they can be safely kept as a reserve, upon which commerce can safely depend in supplying localities that are deficient, and where importations must be made.

It is in accord, then, with that fitness of things referred to by Elias Colbert, in his astronomical work, as pervading the universe, that the climate of most of our country and Russia is favorable for the safe keeping of grain when in bountiful years there is a surplus.

Hence in the world's commerce in grain the American and Russian granaries should be far more important factors than the daily markets of London and Liverpool. These, during recent years since that physical change in this planet wrought by some change in the current of the Gulf stream, have been unnaturally depressed at times by false estimates and by supplies of wheat extracted from countries where dire want and chronic famine have been in effect established by shocking perversions of law, abuse of governmental prerogative, and a total disregard of humanity and justice.

If by such means production should be diminished through the ruin of producers, or their fears of over-production, the effect would be bad, and might prove highly dangerous and disastrous.

True, high commerce, on a Christian and cosmic base, is a grand figure not yet developed. But it can be, and let us hope will

be. Toward this steam and electricity have contributed much in material means, in spite of all errors of men in our age. So with the railway, steam navigation, the elevator, and the thousands of appliances of industry, art and science now in use. In the Eastern world the Suez Canal has been the great commercial event of the age, as the Darien will be in the Western.

But as yet true commerce is unstable and weak; and some of its greatest, truest and strongest factors are kept hidden in the fogs of London. And these seem to constantly envelope American interests and affairs. Hence the plainest and highest interests are kept obscured.

And so with the most commanding National and Cosmic duties, and those policies which we should at least aid to maintain as to the world's purse as well as its granaries. The error and weakness in our commerce, is revealed by the tacit consent given to the destruction or crippling of American navigation. And it is disclosed by the feebleness of its opposition to the rank imposture of demonetization of silver, the faithful and trustworthy handmaid of all human commerce from its beginning. And this deadly imposture and crime against manhood rears its bold front at a time when the world's supply of specie is so scanty as compared with its debts and its necessities. God did not make this world merely as an arena for politicians and money changers, and when incarnate in mortal form as a teacher He whipped the money changers and overthrew their tables. And as a lesson for saving food He commanded that the fragments left from that great, free feast should be saved, and not wasted under any specious and false plea of over-production. Surely true commerce can profit by these lessons. They are divine, and they are in correspondence with the teachings of history, the nature of man and the physical structure of the world, as well as with the plainest common sense.

Fairbury, Ill., July 28, 1885.



## LATE PATENTS.

Issued on July 14, 1885.

GRAIN DRIER.—Geo. Cottrell, San Francisco, Cal. (No model.) No. 322,092. Filed Jan. 24, 1885.

METHOD OF DRYING GRAIN.—David M. Bunnell, Brooklyn, N. Y., assignor of one-half to Jesse H. Bunnell, same place. (No model.) No. 322,252. Filed July 11, 1884.

PROCESS OF DRYING GRAIN.—Henry I. Chase, Philander F. Chase and Henry G. Chase, Chicago, Ill., assignor to the Chase Elevator Co., same place. (No model.) No. 322,257. Filed Nov. 24, 1884.

GRINDING MILL.—Ambrose W. Straub, Philadelphia, Pa. (No model.) No. 322,400. Filed June 13, 1883.

Issued on July 21, 1885.

BALING PRESS.—Charles Smith, Marquette, Mich. (No model.) No. 322,651. Filed Dec. 11, 1884.

DRIVE CHAIN.—Charles E. Alden, Philadelphia, Pa., assignor by direct and mesne assignments of five-eighths to David Benst and John Caldwell, both of same place (Model.) No. 322,405. Filed Oct. 31, 1884.

DRIVE CHAIN.—Charles H. Eggleston, Marshall, Mich. (No model.) No. 322,431. Filed July 18, 1884.

DRIVE CHAIN.—William Stephens, New Richmond, Wis. (No model.) No. 322,653. Filed April 7, 1885.

CORN SHELLER.—Heman A. Barnard and John B. Cornwall, Moline, Ill., assignors to Barnard & Leas Mfg. Co., same place. (No model.) No. 322,777. Filed April 16, 1885.

RE-CLEANER FOR GRAIN AND SEED SEPARATORS.—Abraham Miller, Newark, Ohio, assignor to the Newark Machine Co., same place. (No model.) No. 322,465. Filed May 15, 1884.

GRAIN SEPARATOR.—Israel Hess, Goshen, Ind. (No model.) No. 322,820. Filed April 10, 1885.

SEED CLEANER AND HULLER.—R. Brent Hutchcraft, Paris, Ky. (No model.) No. 322,824. Filed Aug. 14, 1884.

WHEAT, OAT AND COCKLE SEPARATOR.—John Lucas, Hastings, Minn. (No model.) No. 322,548. Filed Feb. 24, 1883.

Issued on July 28, 1885.

CORN SHELLER.—Aurelius V. Pitts and Marcellus H. Pitts, Marseilles, Ill. (No model.) No. 322,964. Filed April 2, 1885.

FANNING MILL SIEVE.—Siver J. Aasen, Republican, Dak. (No model.) No. 323,096. Filed April 15, 1885.

GRAIN CLEANER AND GRADER.—Samuel R. Backus, Toledo, Ohio. (No model.) No. 323,099. Filed Feb. 18, 1885.

PNEUMATIC APPARATUS FOR GRAIN CONVEYORS AND ATTACHMENTS.—Benjamin F. Goodrich, Akron, Ohio, and Lyman Smith, Kansas City, Mo. (No model.) No. 323,317. Filed Feb. 26, 1885.

MOUTHPIECE FOR PNEUMATIC LIFTING APPARATUS FOR GRAIN CONVEYORS.—Lyman Smith, Kansas City, Mo. (No model.) No. 323,224. Filed Jan. 17, 1885.

GRAIN DRIER.—Dennis E. Sibley, Chicago, Ill. (No model.) No. 323,321. Filed Jan. 5, 1885.

PNEUMATIC GRAIN ELEVATOR AND TRANSFER APPARATUS.—Lyman Smith, Kansas City, Mo. (No model.) No. 323,226. Filed June 20, 1885.

MOUTHPIECE FOR PNEUMATIC GRAIN TRANSFER APPARATUS.—Lyman Smith, Kansas City, Mo. (No model.) No. 323,225. Filed March 2, 1885.

GRAIN DRIER.—Thomas Meylor, St. Louis, Mo. (No model.) No. 323,057. Filed Nov. 4, 1884.

Issued on Aug. 4, 1885.

CAR STARTER.—Theodore F. Bourne, Bloomfield, N. J. (No model.) No. 323,629. Filed Dec. 31, 1884.

FEED MILL.—Thomas C. Cadwyan, Springfield, Ohio, assignor of one-half to Benjamin F. K. Jennings, same place. (No model.) No. 323,561. Filed Nov. 29, 1884.

OSCILLATING GRAIN METER.—George B. Howland,

Chicago, Ill. (No model.) No. 323,509. Filed March 24, 1884.

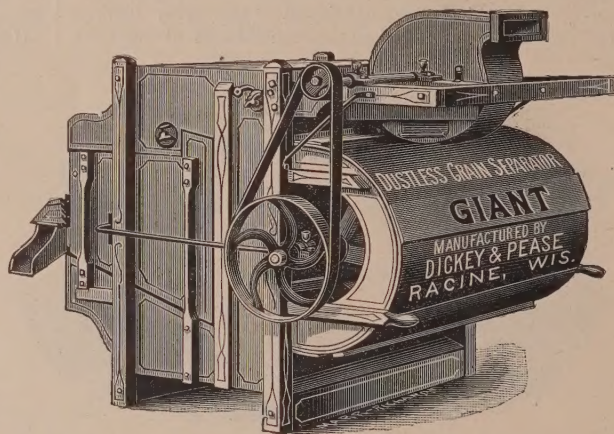
RECORDING WEIGHING SCALE.—Edwin R. Puffer, Riverside, Ill. (No model.) No. 323,885. Filed Feb. 11, 1884.

AUTOMATIC GRAIN WEIGHING MACHINE.—Carl Reuther, Hennef, Prussia, Germany. (No model.) No. 323,533. Filed April 15, 1884. Patented in Belgium Dec. 15, 1883. No. 63,554, and in England Jan. 11, 1884. No. 1,276.

## THE "GIANT" DUSTLESS SEPARATOR.

Our readers will remember that some time ago we briefly described the "Giant" Dustless Separator, made by Messrs. Dickey & Pease, Racine, Wis. The improvements made upon this machine have led us again to make favorable mention of the "Giant," particularly as it seems to gain continually in the estimation of grain men and grain handlers.

The machine is strikingly simple in its construction, and combines the rare qualities of being without complication, and yet possessing many strong points, its want of complexity, it is a strong and durable machine, and has none of the objections attaching to so many machines of this class, of complicated gearing, hidden valves, and "cubby holes" that require to be looked after



THE "GIANT" DUSTLESS SEPARATOR.

and cleaned out periodically. The makers claim that it is the only machine that will make a perfect separation of oats from wheat, screening the grain at the same time. Messrs. Dickey & Pease state that the cost of the "Giant" is from 25 to 50 per cent. less than that of any other separator, and they believe that it is eminently the machine for the times, and that it will pay any one contemplating putting in dustless separators to write for full descriptive circular and judge for themselves. As will be seen from the advertisement in another column of this issue, the manufacturers "guarantee satisfaction for every separator."

## A NEW WHEAT PEST.

A new wheat pest has been discovered in Milwaukee and samples of grain infested with it have been shown on 'Change. The grain was taken from a bin of the best Lake Shore wheat in Mr. Bryden's warehouse. When viewed by the naked eye it was scarcely discernible, being the merest atom. When put under the rays of a powerful magnifying glass, it was seen to be an active midget, transparent in body and apparently germinated from the grain. Its industry was shown by the samples of berry, which had been reduced almost to dust through its workings. Persons who viewed it said that they had witnessed the same thing before in wet or damaged wheat. The bin in which these workers have been discovered is, however, as stated, selected wheat, being culled from the choicest lots that have been sent in. Further examination of the little worm and the extent of its encroachments will be made.

The U. S. Government is using large numbers of the Howe Scales. Borden, Selleck & Co., agents, Chicago, Ill.

## LEGAL NOTES.

### Option Transactions—Note—Bona Fide Holder.

Where a demand note, given as security for a continuing option transaction, but valid on its face, was bought in the regular course of business, and for full value twenty-three days after date, by one who knew that the payees of the note dealt in options, and suspected, but did not know, that it had been taken in an option deal, the United States Circuit Court for the Eastern District of Missouri held (*Mitchell vs. Catchings*) that the note had been negotiated within a reasonable time, and that the purchaser was a bona fide holder without notice.

### Dealings in Options—Notes—Consideration.

Where a dealer contracted with his broker to take options in the name of the latter, it being understood there were to be no actual purchases or sales of grain, and that only differences should be settled, and the broker in taking such options became heavily liable, and on presentation of his account for his payments for liabilities and commissions, the dealer paid him \$2,000 in money and assigned to him four promissory notes payable to himself for \$5,000 each, with his written guaranty of payment, in settlement of his liabilities to the broker, the Supreme Court of Illinois held (*Pearce vs. Foote*) that, as the assignment and guaranty of the notes was in consideration of money won by wager, the same were void and passed no title to the broker or his voluntary assignee.

### The Keokuk Elevator Case.

In the Circuit Court of the United States for the Southern district of Iowa, C. L. Williams, administrator vs. The North German Insurance Company, and two other cases. Opinion by Judge Miller.

The plaintiff, Williams, obtained policies of insurance against the risk of fire on what is known as the Keokuk Elevator. The policies read that the Keokuk Grain Elevator Company is insured against loss by fire to such and such amounts, and the loss, if any, is payable to Williams, administrator; C. L. Williams is and was administrator of his father's estate. At the time of this insurance, at the time it was made, the elevator property had been sold under a decree of this court and had been bought in by Williams as administrator of the estate. He bought it in and held the certificate of purchase, liable and subject to redemption at the end of the year from the date of sale. The condition of the title therefore, was that the legal title was in the Keokuk Grain Elevator Company, and the interest of a purchaser under a defeasible claim was in Williams as administrator of his father's estate. Before the twelve months for which the insurance was to run had expired, it was obvious that the condition of the title must be changed, either the elevator company must redeem and have a clear title to the property before the policy expired, or, failing to redeem, Williams would receive the deed and divest all rights of the elevator company. What took place was that the company did not redeem, that Williams received the deed to the property, and after he had got the deed, the elevator company being divested of all title, the fire took place, but during the life of the policy. All lawyers know that the elevator company having no interest in the property at the time of the fire, was not insured and could not collect any money and could not even bring any suit for such recovery. Nor did the clause "Loss, if any, payable to C. L. Williams," change that legal relation. The loss mentioned in that form of policy was the loss of the Keokuk Grain Elevator Company. If this fire had taken place before the expiration of the time of redemption the policy would have been just what it should have been. It would have expressed the loss of the elevator company. It would have been its loss. The loss should have been payable to Williams, but since the elevator company had no interest in it when the fire took place, there was no loss to it, and Williams was not insured by the policy.

Williams has filed a bill in chancery averring that the language of the policy in that respect did not represent



the contract which was made: He avers that he made a contract with Maxwell, the insurance agent, to insure him and his interest in the property. He avers this with sufficient precision and he swears to it in various forms and shapes, and other testimony is taken on the subject. The first question to be considered was whether, admitting the statements of the bill to be true and taking for granted the testimony of Williams, it was a chancery case. I remember the old decisions in the chancery courts of England on the subject, that a written contract can not be reformed in equity for a mistake in law. That is all the branch of the subject that embarrasses me today. But without examining authorities abroad the decisions of the Supreme Court of the United States, which must govern me, I am inclined to think that doctrine has been much narrowed in modern times. Without going to great length at the present time, I shall state it about this way: Where an instrument fails to represent what both parties intended to have it represent, and it had devolved on one party to draw up the instrument, and the other party merely accepted it, and it does not represent the views of both parties, and if the fault of the instrument was on the part of the party drawing it up, it can be reformed. It would be a harsh rule if a person applying to an insurance agent, who is supposed to know the legal value of all such policies, which he is drawing up every day, and who is supposed to know exactly what is desired, if that agent fails to draw up what was intended to be drawn, it would be harsh to say that that instrument shall not be reformed, and that chancery shall not reform it.

The testimony on that subject, although very well handled by the counsel for the companies, leaves no shadow of doubt on my mind that both parties intended to insure the executor of his father's estate in that property. The writing of the instrument did not stand in the way at all. I think that every one not familiar with rules of law would say that the policies saying that loss if any was payable to Williams, that Williams was insured, but that is a mistake.

Williams' testimony is broad and full and clear that he communicated to Maxwell the exact condition of this property as I have recited it, that there had been a decree and a sale, and that he held the certificate of sale; that it would expire during the term and he would get the title. All these particulars he explained to Maxwell, and he told Maxwell he wanted his own interest insured and Maxwell so understood it. Williams' brother swears to the same thing. He was present; that the whole thing was explained to Maxwell more than once; the clerk in the office of Maxwell confirms this statement; he was present, he wrote out the policies, and he questioned Maxwell about the thing being done, doubted the sufficiency of the language, and Maxwell told him to so fill it out that way, that it effected the object.

When the fire took place Williams went to Maxwell and had a talk with him. Maxwell confirmed his statements in writing.

For some reason it seems Williams knew Maxwell better than some others, and he had Maxwell go for a notary public, and he made a long statement and signed it and swore to it in the presence of two witnesses besides the notary, and the witnesses swear that certain interlineations were made at his suggestion. What would this establish? And yet Maxwell, after getting to California and under contract of re-employment, swears he never heard about this question regarding the title. I do not care to discuss such testimony. I am, therefore, satisfied that the story of Williams is in the main true; that Maxwell understood the character of the title to the property, and that he was requested to provide for that state of things, and he carelessly made the policy as he did, and as it stands to-day. Some authorities are read, some things about need of absolute proof in order to reform a legal instrument, but I do not attach any importance to these, as I am perfectly satisfied that the contract on which this policy was executed was such as to demand the reformation of the policy.

I therefore hold that it should be reformed so as to express the fact that the interest of Williams was insured.

One or two other questions are presented, and about them I have more difficulty. I thought at one time that I would reform the policy and go no further. One of these was the provision as to leased ground; that the policy should be void unless that fact was expressed, and also if the property ceased to be occupied during the term of the policy it should become void unless the company was notified and gave its consent. The bill

seeks to reform the policy in both of these particulars, and asks the insertion in the policy that it was known to be on leased ground, and was to be permitted to be vacant at times. I do not think that, having reformed the policies as to the interest insured, these questions are such as need reformation. I think they can be waived and the company estopped by its own transactions from asserting them.

But I think it is better in these chancery cases to dispose of the whole case if possible, and I therefore think there is no need of a jury on these questions. I am satisfied that Mr. Maxwell knew very well that this was leased ground; that his attention was called to it, and that he made the insurance with that understanding.

Therefore, the company waived that part of the contract.

The lease was not from a private citizen, but from the city of Keokuk, which could not be supposed to have any interest in the burning of the property, or its destruction in any way. And this fact of the leased ground was known to the whole board of insurers.

As to the occupancy of the building, if I were a juror I should say that the property was occupied; that the elevator remained there with its machinery, sometimes used and sometimes not used, as it had been for years. The cessation from use simply meant that no steam was up and that nobody went there to work; but men were around there all the time, and Williams went there frequently, had his papers there, and I think that I, as a juror, notwithstanding some part of the time they were not using the elevator, it was not vacant as an elevator.

But it is claimed that Maxwell knew this and nobody could tell when it would be vacant. Brookings had it at the time of the insurance, and I think no juror could be justified in saying that these conditions are not waived.

On the whole, then, I am satisfied that this company contracted to insure the interest of Williams in these three policies; that the language of the policies failing to express that should be reformed to make them express that. Therefore the other objections are not valid, and a decree should be entered for the complainant accordingly.



Talmage lately preached a sermon on "The Corn Crib."

Oregon will have 9,000,000 bushels of wheat for export this year.

Michigan's crop of wheat turns out to be about ten per cent. less than last year.

The elevator men at Duluth have reduced their charges to about a cent a month.

C. A. Pillsbury & Co. think the damage to the spring wheat crop from 20 to 30 per cent.

A farmer in Western New York committed suicide on account of the ravages of the Hessian fly.

A Stockton (Cal.) grain dealer estimates the overplus of grain bags this year to be nearly 10,000,000.

"Are you a bull or a bear?" asked an acquaintance of a speculator. "Neither," he replied; "I think I am an ass."

Vessel men complain of the frequent occurrence of shortage with boats loading grain at the Detroit elevators.

A New Yorker bought 175,000 bushels of No. 2 Spring wheat in this market for shipment at 94 cents per bushel.

Some Minnesota farmers report a loss to the wheat crop of from 30 to 40 per cent., caused by bad weather and insects.

The Dakota railroad commissioners will inspect the Northern Pacific Railroad, and elevators along the line in September.

For the fiscal year ending in June twenty-eight leading shippers of San Francisco shipped to foreign ports 800,000 tons of wheat, valued at \$21,192,000. This does

not include flour or other grains, which were exported in large quantities. California is in no wise dependent upon her mines for wealth.

Oats at present prices are being shipped to England quite freely. One firm in St. Louis recently sold and shipped 125,000 bushels.

The "visible" is not likely to go below 40,000,000 bushels again for some time, unless an increased export demand should spring up.

The New York Produce Exchange estimates the visible supply of wheat at nearly 40,000,000 bushels, while over 4,500,000 bushels of corn are in sight.

The first shipment of the barley crop of 1885 made its appearance in Chicago on July 28, and was received by W. F. Johnson & Co., from Juniata, Neb.

Not long since a 5,000-bushel lot of oats was sold here against which there were charges to the extent of over 14 cents per bushel; about half what the oats brought.

Reliable Minnesota farmers and old wheat raisers say they can not see over eight or ten bushels per acre in the wheat crop, and that it must be well secured to yield that.

A farmer in Barnes county, Dak., has a field of barley that grows 38 inches in 38 days, just an inch a day from sowing. It is believed no climate or soil can beat that. —*St. Paul (Minn.) Globe.*

New spring wheat and new flaxseed, the first seen in this city of the crop of 1885, arrived July 29. The former was received by Milmine, Bodman & Co., and the latter by Foss, Strong & Co.

"The Hessian fly is very ungenerous to attack the wheat in the West," says an exchange. The Hessian fly has no grudge against wheat. It never operated on the Chicago Board of Trade.—*Puck.*

A firm in Rochester, Minn., which buys at about 120 points in the Northwest, says that the crop of spring wheat will be from 25 to 33 per cent. short this year on account of damage by recent storms.

There are said to be 20,000 tons of wheat in the various warehouses along Snake River, Wash. Ter., waiting for the prices to rise. Farmers in that section claim to have about half as much more in their home granaries.

The Board of Trade of St. Paul and the State Board of Inspectors are not in harmony as to the grading and inspection of wheat. Some members of the former are averse to working under the state rules, and would prefer to have an inspector of their own.

Pope & Lewis in their last circular, say: "This time last year we had a visible and invisible supply of 600,000,000 bushels of wheat, all well secured, and in good condition. To-day our visible and invisible supply does not exceed 400,000,000 bushels, and a good part of that is yet in the field subject to weather contingencies."

"I don't want anything bad to happen," remarked the grain speculating son of a Quaker on 'Change lately; "I don't want anybody to kill anybody, nor anything of that sort, if it can be avoided; but, if the Englishmen and the Russians really want to fight, I should hate to discourage them. I am a friend of peace, but, if there's to be war, I want it to come quick—right off, and no more nonsense." This son of a Quaker and friend of peace has a fine lot of wheat to sell.

"A curious feature of the California freight market," says a ship-owner, "is the fact that foreign ships regularly receive a shilling or two more per quarter on wheat to the Continent or to Liverpool than American ships can obtain, but when the American ship is sold and gets a foreign register her defects are thereby cured and she receives the highest rates. This is said to be due to the fact that foreign insurance companies charge higher rates on American than on ships of European nationality."

The growing demand for American corn abroad is indicated by the fact that our exports of this grain were larger the past year than ever before. The area under cultivation is estimated at 4,000,000 acres more than produced the large crop of 1884. It is almost too early yet to speak with certainty, as ultimately frosts may spoil the crop which was generally got in late in the spring, and which is yet backward. Present conditions in nearly all parts of the country are favorable. A few more weeks of good weather and we shall have a crop of corn more valuable than the largest wheat crop, and of which we shall almost certainly have more to export than of wheat the coming year.





Parker, Dak., is to have a new elevator.

A new elevator is completed and running at Chase, Kan.

Another elevator and feed mill is to be built in Dallas, Tex.

Wakefield, Kan., wants a good mill and another elevator.

E. D. Skinner intends building an elevator at Albion, N. Y.

Two new elevators will be completed at Medora, Dak., this season.

Walden & Pence have sold their grain elevator at Anderson, Ind.

The farmers at Doland, Dak., are building a 10,000-bushel elevator.

J. B. Wilson has sold his elevator at Longmont, Col., to J. K. Mullen.

The Downs Mill & Elevator Co. succeed S. H. Downs at Topeka, Kan.

Dixon Brothers' elevator at Dedham, Iowa, is progressing rapidly.

The work on the Mitchell, Dak., elevator is being rapidly advanced.

The Jefferson Mill & Elevator Co., of Mount Vernon, Ill., have dissolved.

Jordan & Ruby, grain dealers, Cotulla, Tex., have dissolved partnership.

F. H. Peavey & Co., of Minneapolis, have discontinued their Sioux City office.

New machinery is being added to the Ogilvie Elevator at Manitou, Man.

M. Lavelle writes us that he has gone out of the grain business at Atchison, Kan.

The new elevator at Minneapolis, Minn., will be ready for grain in a few weeks.

J. B. Canterbury & Co. are about building a new grain elevator at Byron, Minn.

John Cole is building a new elevator of 20,000-bushels capacity at Rochester, Minn.

The National Elevator & Dock Co. succeed Vincent, Nelson & Co. at Chicago, Ill.

McAleer Bros. & Co. succeed James S. McAleer in the grain business at Unadilla, Neb.

Brockway & Hoadly, grain dealers, of Burchard, Neb., have sold out their business.

Taylor & Gilmore, grain dealers, of Dana, Ind., have dissolved. Sanford Taylor succeeds.

John Earl, grain and lumber dealer, at Schoolcraft, Mich., has sold out to Frank H. Earl.

Another elevator is being built near the Manitoba Depot, Graceville, Minn., by Cargill Bros.

Kinsman & Endicott, of Cedar, Iowa, are building a new grain elevator 36x24 and 20 feet high.

J. E. & W. F. Botsford, grain dealers, Port Huron, Mich., have sold out to Wheeler & Perkins.

Andover, Dak., can now boast of three elevators, which, however, will be none too many for the crop.

Quimby & Brereton, hay and grain dealers, Denver, Col., have dissolved. S. W. Brereton continues.

A grain warehouse is being built at Waltham, Minn., on the new Minnesota & Northwestern Railroad.

James Holes is building a 20,000-bushel elevator on his farm at Hunter, Dak., to be run by horse power.

J. W. Conley has withdrawn from the firm of J. W. Rumsey & Co., grain commission merchants, of this city.

K. K. Liquin, of Britt, Iowa, has placed an order for elevator supplies with the Frost Mfg. Co., Galesburg, Ill.

William Tibbitt, proprietor of an elevator, and grain dealer at Waupaca, Wis., is succeeded by Treleven & Co.

The Pacific Elevator Co. will move its headquarters from Gaylord, Minn., to Minneapolis, same state, this fall.

The new elevator at Armourdale, Kan., is progressing finely, and the framework is now rising rapidly to view.

New elevators are being built at Aberdeen, Groton, Bath, Ipswich, Westport and Frederick, all situated in Dakota.

The Merchants' Elevator, at St. Louis, Mo., was opened for business Aug. 8. It has a capacity of 700,000 bushels.

Wilkins & Mackey, hay and grain dealers, Welda, Kan., have dissolved, and are succeeded by Young & Mackey.

Messrs. G. W. Van Dusen & Co., who control most of the elevators along the Winona & St. Peter Railroad, will have the management of the elevator along the new

Minnesota & Northwestern Railroad, the Dodge Center route; but they will not be run in Van Dusen & Co.'s name.

The new Minneapolis & Northern Elevator at Crookston, Minn., is completed. It has a capacity of 50,000 bushels.

Tighe Bros., of Bradshaw, Neb., have placed an order for elevator machinery with the Frost Mfg. Co., Galesburg, Ill.

M. & M. Edwards, of Albia, Iowa, recently put in some new machinery from the Frost Mfg. Co., Galesburg, Ill.

W. S. Dexter has sold his grain elevator at Harvard, Neb., and gone to Kansas to look over the field for investment.

W. E. Jordan, of Bancroft, Iowa, has ordered the machinery for his new elevator of the Frost Mfg. Co., Galesburg, Ill.

A. Roberts, of Rising City, Neb., is remodeling his elevator and putting in machinery from the Frost Mfg. Co., Galesburg, Ill.

Another elevator is talked of at Portage la Prairie, Man. The farmers are considering the advisability of erecting one.

John Wright is building an elevator at Lincoln, Neb., and has contracted for his supplies with the Frost Mfg. Co., Galesburg, Ill.

W. R. West & Co., of Glasco, Kan., have ordered the necessary supplies for their elevator of the Frost Mfg. Co., Galesburg, Ill.

William A. Rook, a wealthy grain, seed, and flour dealer, of Newark, Ohio, has disappeared, and his whereabouts are unknown.

Lower & Wood, grain and produce dealer of Alliance, Ohio, made an assignment on July 16. The liabilities amounted to \$16,000.

The St. Paul Roller Mill Co. have arranged to purchase the elevator at Rush City, Minn., which they have occupied for some time.

White & Glade, of Crete, Neb., are fixing over their elevator and are putting in machinery from the Frost Mfg. Co., Galesburg, Ill.

Jameson Bros., of Stella, Neb., have ordered an engine, boiler and complete elevator outfit of the Frost Mfg. Co., Galesburg, Ill.

The new wheat warehouse, Elevator F, at Duluth, Minn., will be completed in a few weeks, and will hold 1,250,000 bushels of wheat.

N. H. Warren & Co. have placed their order for the machinery for a new house at Geneva, Neb., with the Frost Mfg. Co., Galesburg, Ill.

R. Barden, a grain operator of Duluth, Minn., failed to meet his obligations at the August settlement. The liabilities were \$5,500 without assets.

J. L. Packard, of Creighton, Neb., is putting into his elevator one of the "Giant" Dustless Flax Separators of Dickey & Pease, Racine, Wis., make.

Hubbell, Neb., is getting a new elevator built by Wirt & Deuell, who use nothing but "Frost" machinery of the Frost Mfg. Co., Galesburg, Ill.

Geo. C. Howes is building a 25,000-bushel circular elevator at Howes' Sliding, Minn. Barnett & Record, of Minneapolis, Minn., have the contract.

White & Leacock, of DeWitt, Neb., are building a new elevator at Hoag, Neb., and are putting in machinery from the Frost Mfg. Co., Galesburg, Ill.

Henry Rickel, of Detroit, Mich., is making improvements to his malt house, and will add a grain elevator, etc. Hess & Raseman are the architects.

G. W. Ehle, of the firm of Ehle & Co., owners of elevators along the Milwaukee & St. Paul Railroad, have purchased the elevator at Menoken, Dak.

The farmers in the vicinity of Scotland, Dak., have organized an alliance for the purpose of building an elevator to handle and ship their own grain.

Mason Gregg & Bro. are building a new house at Cuba, Kan., and have ordered engine, boiler and complete outfit of the Frost Mfg. Co., Galesburg, Ill.

Webb Bros., of Bedford, Iowa, are putting up a new house at Clearfield, Iowa, and have ordered all the machinery for it of the Frost Mfg. Co., Galesburg, Ill.

William Lamb & Co., of Beatrice, Neb., are building a new elevator, and get all their machinery, engine, boiler, etc., from the Frost Mfg. Co., Galesburg, Ill.

F. C. Schneider, of Winona, Minn., has secured contracts for building the large grain tanks and other tank and boiler work for the new grain elevator at that place.

The new elevator of Mathews, Bond & Co., at Miltonvale, Kan., is about completed. The outfit was furnished by the Great Western Mfg. Co., of Leavenworth, Kan.

At Armourdale, Kan., a petition has been circulating among business men for the erection of a warehouse by the railway company. The location talked of is near the elevator.

Littler & Sloat have purchased Jay Turner's elevator at Harvard, Neb. Littler has been in the employ of Turner many years, and thoroughly understands the business.

Dickey & Pease, of Racine, Wis., manufacturers of the famous End-Shake Warehouse Fanning Mills, the "Giant" Flax Mills, and the "Giant" Dustless Grain Separators, have recently patented a Dustless Flax Separ-

or, a new departure in this line, and said to be the only perfectly dustless machine for this work in the market.

The Bismarck Elevator Company, Dak., has been negotiating with Minneapolis parties with a view to putting in a flouring mill with a capacity of 150 barrels per day.

Cochrane & Co., of Phillips, Neb., have purchased an entire outfit, including a 15 horse power engine and a 20-horse power boiler from the Frost Mfg. Co., Galesburg, Ill.

Mr. Louis Schnell, of St. Charles, Minn., has bought the stone and what is left of C. W. Seefeld's burned elevator at Utica, Minn., and is now building an elevator at that place.

W. C. Mauzy & Co., of Rushville, Ind., have just placed in their elevator at Morristown, Ind., a 15-horse power engine and boiler, purchased from the Frost Mfg. Co., Galesburg, Ill.

N. H. Warren & Co., of Chicago, have just put into one of their elevators in Nebraska one of the "Giant" Dustless Flax Separators, manufactured by Dickey & Pease, Racine, Wis.

The first 5,000 bushels of new wheat sold at the Chamber of Commerce, Minneapolis, Minn., was bought by Yerxa & Kirkbride. It was sold by P. O. Peterson, of E. Holmes & Co.

Wilson & Maxfield is the name of a new grain commission firm at Minneapolis, Minn. Kinsey Maxfield was late grain inspector at that city, and C. P. Wilson is of Sioux Falls, Dak.

P. S. Heacock, of Falls City, Neb., is building two fine elevators at Shubert and Preston, Neb., and has ordered "Frost" outfits, engines, boilers, etc., of the Frost Mfg. Co., Galesburg, Ill.

Morrissey Bros. are building a new elevator at Milford, Neb., which, when completed, will be the finest in that locality. It will be 24x48 feet. The elevator at Ruby is now putting in the machinery.

Hahne Bros., of Schaller, Iowa, and L. B. Shepherd & Co., of West Point, Neb., are putting into their elevators the well-known "Giant" Grain Separators, manufactured by Dickey & Pease, Racine, Wis.

G. H. Christian, at Duluth, Minn., and the Central Elevator Company at Minneapolis, Minn., have made application for elevator licenses, under the new law, to the railway and warehouse commissioners.

The Minneapolis & St. Louis Elevator Co., of Minneapolis, Minn., has been incorporated, with a capital stock of \$100,000, by E. Holmes, Henry W. Holmes, G. Sunwall, A. Knoblough and Wm. R. Merriam.

G. W. Batch, a large grain dealer and capitalist of New York, has visited Duluth, Minn., to make arrangements for opening a bank. Its organization is under the laws of the state, with a capital of at least \$200,000.

Hanover is bound to become a leading grain town of Northern Kansas. Another fine steam elevator is being built by Mr. Hellman, whose well-known business abilities guarantee the full success of the enterprise.

Nordyke & Marmon Co., of Indianapolis, are furnishing the grinding apparatus and other machinery for the Blue River Starch Works, at Edinburgh, Ind., which were recently destroyed by fire, and are now being rebuilt.

Keeline & Felt, of Omaha, Neb., are about to build another warehouse. The Wabash road is putting in a side-track at Omaha to connect with the warehouse of Raymond & Campbell, Sackett & Preston, and Keeline & Felt.

The Carberry Mills and Elevator Co. have applied for letters of incorporation. Mary Northwood and John Northwood, of Carberry, Man., and H. J. Eberts, of Winnipeg, are the incorporators. The capital stock will be \$50,000.

At Austin, Minn., arrangements have been made for the immediate construction of a grain elevator and warehouses on the Minnesota & Northwestern Railroad. Mr. Van Dusen, of Rochester, is the main backer of all the elevators on this new road.

The Chicago & Northwestern Railroad Company have commenced the erection of a grain elevator, 60x126 feet, with a storage capacity of 250,000 bushels. Estimated cost, \$75,000. I. T. Moulton & Son, Chicago, Ill., are the architects and builders.

A suit was brought, on July 22, by R. P. Fitzgerald, of Milwaukee, and P. D. Armour, Carrie L. Munn, and W. M. Egan, of Chicago, against J. B. Oliver & Co., for libel and damages in the sum of \$261,345. The result is the outcome of a grain transfer.

The West Superior Elevator Company, at Madison, Wis., filed articles of association on Aug. 6, the object being to erect, lease, or operate elevators. The capital stock is \$300,000, and the incorporators are Hiram Hayes, C. L. Catlin and H. S. Butler.

A. J. Meade, grain merchant at Kansas City, and a director of the Board of Trade, suspended Aug. 15. Mr. Meade is proprietor of the Alton Elevator. The suspension is regarded as temporary, as his assets are said to be quadruple his liabilities.

The Farmers' Elevator Co., at Aberdeen, Dak., has been organized with the following directors: W. T. Elliott, J. W. Holt, H. S. Williams, James Ringrose, F. H. Hagerly, C. A. Bliss and Henry Beard. The company will at once begin the erection of a 25,000-bushel elevator on the Chicago & Northwestern track, just south of the depot. The location of the elevator has been a mat-



ter of much dispute, the action of the directors in locating it on the Northwestern being mainly due to the refusal of the Milwaukee company to open up Main street.

The Chicago branch house of David Dows & Co. is succeeded by the new firm of Dows, Munn & Co., consisting of A. E. Orr, David Dows, Jr., C. A. Munn and G. B. Cooksey. The provision department remains in charge of Alfred S. Porter, who gives special attention to orders for shipment.

Barnett & Record, of Minneapolis, Minn., will build a 230,000-bushel circular elevator at Hillsboro, Dak., and another of the same capacity at Auburn, Dak., for the Florence Mill Co., of Stillwater, Minn. The same firm are building a 25,000-bushel round elevator at Ashton, Dak., for the Farmers' Elevator Co.

A dispatch from Mattoon, Ill., says: "For the first time in the history of grain shipments wheat is going from East to West over the railroads. St. Louis millers being the receivers of large cargoes." The dispatch adds that on some days as many as 100 carloads passed over the Minneapolis & St. Louis R. R.

Babcock & Andrews, the proprietors of the big bucket shop at Syracuse, N. Y., probably the most extensive in the state, failed July 24 for \$500,000 or more. The firm's principal office was at Syracuse, and they had about seventy-five branch offices distributed throughout the good-sized interior towns of New York, in New England, and in Canada. The manager of the Syracuse office claimed that they lost \$75,000 alone on the May wheat bulge. They figured their assets at a nominal sum, mostly in office furniture, and they have got \$100,000 in customers' notes, which are almost valueless. The bucket-shop players all over the state of New York were badly hit.

Mr. H. J. O'Neill, of Winona, Minn., who has had the rental of the elevators of the Minnesota Elevator Company since its failure, was the heaviest purchaser at the assignee's sale. His purchase includes warehouses at this city, Eggleston, Reed's Landing, Frontenac, Lake City, Kellogg, Dak., Zumbrota and seven others in Minnesota, and four in Wisconsin. Price, \$40,000. The Eau Claire, Wis., property will be sold at private sale. Among the other sales was a certificate of membership in the Minneapolis Chamber of Commerce for \$251, and property about the Wabasha elevator for \$1,250. Fifty shares of stock in the Chippewa Bridge Company, of Durand, Wis., remain unsold.

Says the *Pioneer*, of Aberdeen, Dak.: Messrs. Cargill & Bagley's new elevator on the Milwaukee system at this point is about completed and ready for business. Its capacity is 15,000 bushels. It is built on the same model as the old elevator, but will contain all the most modern improvements. The above named firm are Minneapolis capitalists, and are putting their money into elevators with an abiding faith, as well they may, in the fertility and resources of this portion of Dakota. They have built in the last two months elevators at the following places on the C. M. & St. P. Ry.: Aberdeen, Bath, Groton, Andover, Bristol, Mina and Ipswich. Mr. McGlacklin, who has supervised the construction of all these elevators, will superintend the wheat buying and act as general manager of the seven elevators.

Chicago elevators, as per the last official returns, contain 14,775,924 bushels of wheat, 774,576 bushels of corn, 272,611 bushels of oats, 20,111 bushels of rye, and 489 bushels of barley, making a grand total of 15,843,711 bushels, against 16,241,032 bushels a week ago, and 3,481,438 bushels at this period last year. Milwaukee warehouses are stored with 3,339,034 bushels of wheat, 999 bushels of oats, 6,341 bushels of rye, and 1,403 bushels of barley. New York and Brooklyn warehouses are stored with 4,883,103 bushels of wheat, 408,093 bushels of corn, 393,250 bushels of oats, and 5,424 bushels of rye. Exports from seaboard ports last week included 110,600 barrels of flour, 695,900 bushels of wheat, 804,000 bushels of corn, 104,800 bushels of oats, 16,000 bushels of rye, 5,600 barrels of pork, 2,457,000 pounds of lard, and 4,721,572 pounds of bacon. Grain in sight in the United States and Canada: Wheat, 40,779,409 bushels; corn, 4,250,713 bushels; oats, 1,837,480 bushels; rye, 140,511 bushels; barley, 112,472 bushels. As compared with the stock in sight on the 1st inst. there is an increase of 517,142 bushels of wheat, 13,715 bushels of rye, and 4,599 bushels of barley, and a decrease of 240,250 bushels of corn and 225,170 bushels of oats.

San Francisco *Journal of Commerce*: "The projectors of the Nevada Warehouse and Dock Co., seeing the advantages offered at Port Costa as a receiving and shipping point, availed themselves of this most favorable location, and have now by far the most complete and extensive institution of the kind on the Pacific coast. The warehouse has a storage capacity of 100,000 tons, with a water frontage of 2,300 feet, where the minimum depth of water at low water mark is 26 feet. The warehouse has a mill attached, containing the newest and most approved machinery for the cleaning of foul or smutty wheat. In the erection of the buildings every care was taken to make them secure against fire. The shingles were covered with several coats of fire-proof paint, and the sides were coated with metallic paint. Fire pumps are so arranged as to draw water direct from the straits, and have also connection with a reservoir on the bluff. There are 38 two-inch fire hydrants, with 50 feet hose attachments, thus giving every possible protection. As the railroad runs along one side of the building, the facilities for shipment by land are equal to those afforded by water; indeed, this warehouse is justly considered the best situated and most conveniently arranged one on the

coast, if not in the United States. About 150 vessels received their cargoes here during last season, and in January, 1885, alone, 30 ships were loaded. The rates are as follows: Storage on grain, 25 cents per ton per month. Total storage for season not to exceed \$1 per ton. On flour and mill produce, 30 cents per ton per month; total per season not to exceed \$2 per ton. Grading wheat, 50 cents per ton; cleaning, 75 cents; cleaning and smutting, \$1.50 per ton. Wm. Angus is the Resident Superintendent at Port Costa. The San Francisco office is in the Nevada Block; George L. Brander, president, and W. R. Price, secretary."

The Fargo Southern Elevator Company, at Fargo, Dak., on July 21 sold their elevators and warehouses to L. G. Hodges, of Milwaukee, G. G. Hyde, of La Crosse, and H. F. O'Neill, of Winona, for \$50,000. The storage capacity is 400,000 bushels. The Fargo Southern Elevator Company, however, will still remain in existence and expect to do business. The transfer of this line of grain warehouses to the gentlemen above named is looked upon as a very important event, as it opens a new market for the No. 1 hard of the valley south and east of St. Paul and Minneapolis.

G. S. Barnes, President of the Northern Pacific Elevator Company, in regard to the condition of the wheat in Dakota, probable prices, says his agents, in the last ten days, have reported no damage in North Dakota from wind or rain. He had looked up the matter pretty thoroughly and believed the acreage in the territory is about 20 per cent. less than last year. The decrease was greater in the North than in the South. Four-fifths of this land had been put into other crops. Allowing for some damage by blight, rust and storms, the average per acre will be fully equal to last year, making the aggregate wheat product of Dakota one-fifth below 1884. He anticipates a dull market at the start, and, perhaps, a small reduction from present figures, but better prices later. On the whole he regards the prospects favorable for Dakota wheat growers.

Charles Kaestner & Co. report the following sales: To the Union Iron Works, Decatur, Ill., a 20-inch mill; to the Washburn Mill Co., and J. P. Perkins & Co., Pullman, Ill., each a 30-inch mill; to the Tascott Mfg. Co., Los Angeles, Cal., a 48-inch putty mill and paint grinding outfit; to G. W. Pilkin & Co., a putty chaser; to Needham & Rupp, a mill-boring outfit; to Schutler & Holtz, a 16-inch paint mill; to W. H. Pettit & Co., Kenosha, Wis., grain elevators; to John H. Yingst, Venango, Kan., a corn harvesting machine; to the Frontier Land and Cattle Co., a 60-horse power automatic engine and boiler, with complete steam feeding plant for 2,500 cattle; to Vorce & Blee, Springfield, Ohio, an automatic barrel elevator; to the Cummings Akron Cement Works, three 30-inch cement mills; to Priest, Cleveland & Co., Shenandoah, Iowa, 50 automatic mill attachments, etc.

W. F. McKinney, grain and commission merchant, of Bismarck, Dak., recently received a communication from his Duluth correspondent, reading as follows: "Our state inspectors took charge of grain inspection here on the 1st inst., and the first day the elevators refused seven cars of their inspection. The matter was referred to the grain committee of the Board of Trade and the Chief State Inspector here, and it was decided that eleven cars should go in as inspected and the remaining six cars reduced in grade. The make-up of the State Board of Inspection is in the interest of good grades, and justice will be done to the farmers by them, and as soon as they get fairly to work we think their grades will be the most satisfactory that have ever been given here. This is certainly pleasing information to the grain growers of Dakota, who are necessarily at the mercy of the Minnesota market, and it looks as if legislation in the interest of the farmers is beginning to bear fruit in Minnesota. It is likely that between the inspectors of Dakota and those of Minnesota something like justice will be done the farmers this year."

Several years ago a trouble arose between Mr. N. E. Colstrom, of Minneapolis, Minn., and the Minneapolis & St. Louis Railway Company, from the refusal of the latter to grant certain side-track facilities to an Eastern capitalist, who intended purchasing Colstrom's property at the corner of Twelfth street and Second avenue. The decision of the company aroused Colstrom's anger, and finding out that, as owner of abutting property he was entitled to the use of one-half the street, which, within ten feet of his property, was covered by the tracks of the railway leading to the Central Grain Elevator, he brought an injunction suit against the company, resulting in his final victory. The company was ordered to refrain from using the track nearest to Colstrom's property. The elevator and railroad companies, however, managed to elude the decision of the court. The wheat-laden cars would be placed close to the section of the track covered by the injunction, and by means of a rope pulled over the forbidden track by the elevator engine. But Mr. Colstrom seems to be determined to fight the "unobliging company" to the end. On the morning of July 30 he proceeded, with a gang of working men, to the troublesome tracks, and had them torn up in spite of the remonstrances of the railway and elevator authorities, the latter insisting that the injunction granted by the court did not affect the elevator. The chief of police was asked by the enraged elevator men to interfere with Colstrom's tearing up, but refused to do so, after learning the facts of the case, and Colstrom was allowed to continue his destructive work all day. What will be the final outcome of the trouble it is hard to say; but the elevator company is most seriously inconvenienced by this trackage war.

## Fires, Casualties, Etc.

Augustus T. Wood, grain dealer, etc., of Salem, Mass., died recently.

It is reported that A. Wilson, grain dealer, at Parsons, Kan., died recently.

P. T. Flynn, hay and grain dealer, San Francisco, Cal., has been burned out.

The elevator of the Wahpeton Mill & Elevator Co., at Wahpeton, Dak., was struck by lightning Aug. 8.

Whitmore & Co.'s elevator, at Boyd, Minn., was burned by lightning on July 28. Loss, \$25,000. It will be rebuilt immediately.

At Lanark, Ill., David Wolf, a grain buyer, was thrown from a carriage by a runaway team. He was badly bruised about the face and head.

The terrific tornado which struck Hawley, Minn., on July 29, moved an old elevator and unoccupied building, owned by W. L. Hilliard, from the foundations.

The great fire at Toronto on Aug. 3 destroyed four elevators, those of Adamson & Co., Hamilton & Son, J. N. Bard and Sylvester Bros. The loss was very large.

At East Dubuque, Ill., a warehouse belonging to a man named Le Parte, of McGregor, Iowa, was destroyed by fire; 500 sacks of grain stored in the house were saved. Loss, \$1,200; insurance, \$500.

Three men at work on the new elevator of Sawyer's, at Valley City, Dak., were seriously hurt on July 21 by falling with a scaffold breaking down. Two of the men, it is thought, will not recover.

A grain warehouse, situated on the Fort Wayne Road, at Nevada, Ohio, owned by L. G. Russell, of Crestline, was entirely destroyed by fire on Aug. 5. The loss, amounting to \$5,000, was fully covered by insurance.

The grain elevator belonging to V. Lane, at Lane Station, Ill., was burned on the night of Aug. 12. The building was filled with grain, which was also destroyed. Only about \$1,000 insurance rested on the property.

A hailstorm near Northwood, Minn., destroyed 250,000 bushels of wheat ready for the harvest, on July 26. At Warren, Minn., two large grain houses were blown from their foundations, and Pillsbury & Hulbert's elevator was damaged.

James Bradford, an employe of the Wabash elevator, Chicago, Ill., fell from the top floor to the basement—sixty feet—on Aug. 6, and received internal injuries. He was saved from instant death by landing in a bin filled with grain.

On Aug. 9 three grain warehouses at Clifford, Ont., were destroyed by fire, together with 2,000 bushels of wheat. Two of the warehouses belonged to W. D. Williamson, and the third with the wheat to E. Folton. The loss was about \$5,000.

The storm which swept over Audubon, Minn., on July 29 blew E. P. Skarne's granary off the foundation. The old Sawyer grain warehouse was carried off its foundations entirely, and moved forty feet. Jacob Fogerty's granary was moved eight feet.

The elevator belonging to the Minneapolis & St. Louis Elevator Company, at Boyd, Minn., was struck by lightning on July 27 and burned to the ground. The elevator had a capacity of 20,000 bushels, and was valued at \$5,000. There was no insurance.

Brace & Burton's elevator at Persia, Iowa, on the St. Paul Road, east of Council Bluffs, was burned on Aug. 1, with 2,000 bushels of corn. The building was insured for \$4,000, but there was no insurance on the contents. The origin of the fire is unknown.

A. H. Reed, a prominent grain dealer of Miller, Dak., while on his way home, ten miles northwest of Miller, was struck by lightning on the evening of July 15. The horse not being hurt went directly home, when Mrs. Reed found her husband dead in the buggy.

Lyman Stillson, a lad of 14 years of age, was playing with other boys in Gregg Brothers' elevator at Seneca, Kan., on July 31, and jumped into a wheat bin. A car was loading at the time, and young Stillson was caught in the spout and suffocated under the moving wheat. His dead body was recovered after two hours.

The drying-room of Bartholomae & Leicht's new brick malt house, adjoining their brewery, at Chicago, Ill., burned out recently, and was damaged to the extent of \$5,000. The fire was caused by the friction of a pulley in the department where the grain is unloaded, igniting a large quantity of accumulated dust. The building was insured for \$44,000.

The grain elevator at the intersection of the Grand Trunk and Rock Island railroads, near Chicago, Ill., took fire from a defect in the smoke-stack on the morning of July 31, and in less than thirty minutes the entire building was in ruins. The elevator cost at the time of building over \$10,000. The ownership was in litigation. The building was recently leased by F. H. Mealiff & Co., but there was only a small quantity of grain in store.



# THE AMERICAN ELEVATOR AND GRAIN TRADE

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HARLEY B. MITCHELL, - - - Editor.

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## ADVERTISING.

This paper has a large circulation among the elevator men and grain dealers of the country, and is the best medium in the United States for reaching this trade. Advertising rates made known upon application.

## CORRESPONDENCE.

We solicit correspondence upon all topics of interest connected with the handling of grain or cognate subjects.

## THE CORN CROP.

The government report of August on the corn crop shows an improvement since the last report. With seasonable moisture and favorable temperature the average yield will be 26 to 27 bushels per acre. In 1884 the average of August was the same, but fell three points during the days following, the ultimate yield being 26 bushels. In 1879 the average for August was 99, and the final yield as reported, 28 bushels. In the corn states the average is at present, Iowa, 101; Nebraska, 100; Ohio, 96, Indiana, 95; Illinois, 94; Kansas, 90; Missouri, 89. The meteorological conditions have been generally favorable, but the prospects have not been exceeded since 1880.

## TERMINAL CHARGES AND THE WATERWAYS.

There has never been a season so unremunerative as the present to the lake carriers and the boatmen of the Erie Canal. Defeated early in the season in their effort to have terminal and transfer charges regulated by law, the boatmen and lake vesselmen have been carrying grain the whole season without profit, or hope of profit. The Lake Carriers' Association, at a recent meeting addressed a letter to the Western Elevating Association, asking for a reduction on the charges for shoveling and elevating. To this letter a reply was returned, stating that the Western Elevating Association had already reduced its storage charges, and would allow vessel owners a rebate of 50 cents per 1,000 bushels on grain elevated during the month of August, provided the vessel men would accept this concession as a settlement of the whole matter. This paltry offer was promptly declined. Buffalo is but a transfer point, and the reduction of storage charges is not so liberal as it might seem.

The elevator ring at Buffalo is one of the most conscienceless monopolies that ever disgraced a city. Buffalo has over thirty elevators, most of which are permanently idle; yet the grain shippers are obliged to pay dividends on this useless capital; for the ring pools the elevators and divides the proceeds of its extortion. Six or eight elevators would amply supply all needs, yet over thirty are making money by exacting toll on the grain. It would be a grand good thing if such a conscienceless pool could be declared a conspiracy, for such it is practically. The whole thing is aggravated by the fact that some of the charges are wholly, or in part, fictitious. All grain that is transferred is charged for storage, whether it has been stored or not, and the charges for shoveling are based on what was a fair charge, perhaps, when a patent covered the steam shovel. The pat-

ent has expired, but the charges remain at the old figure. Any body of men ought not to be allowed to exact such extortionate charges on the grain shipped over the lakes and canal. The Buffalo ring ought to go.

## A NEW GRAIN DESTROYER.

A new plague has appeared in Dodge county, Minn., namely, a worm which has been destroying the wheat in that section by eating the grain in the head. According to the report of Mr. O. M. Oestland, the state entomologist, the insect is of the same species as that noticed by Harris in his "Insect Injurious to Vegetation," as found in some of the Eastern states. It is three-eighths of an inch long and provided with sixteen legs; its color is a pale reddish brown, with three longitudinal paler or colorless lines on the back, and a broader pale stripe on each side of the body. The head and the first segment are shining brown. On each segment a few minute black points are regularly disposed. The legs, when disturbed, readily suspend themselves by a slender thread.

Very little is as yet known about the life history of the insect. Its larva (or caterpillar) is found in the stack of the wheat at the time of threshing, and by a little care can then easily be destroyed. Mr. M. D. Dresbach, a farmer of Dodge county, has promised to investigate the matter more fully.

## THE CHESS QUESTION.

In arguing the "cheat" or chess question, the *Farmers' Advocate* says that a committee of botanists recently appointed by the Michigan Agricultural Society, having carefully examined an ear of wheat containing a spikelet of chess, unanimously agreed that the chess did not come from the wheat, but was accidentally clasped in the axil of the wheat. Dr. Dunlop, on the other hand, adhered to the theory that chess being so closely related to wheat, the former will be turned into the latter. The Rev. J. J. Chisholm, of Antigonish, N. S., recently found two ears of wheat in each of which a spikelet of oats was attached. According to Dr. Dunlop's theory the wheat must have turned to oats. But it can be plainly seen by the naked eye that the spikelet of oats is attached to the wheat stalk by means of the oat pedicle; and it is quite possible that a spikelet of any grain may lodge in the ear of another during the last period of growth. However, the majority of farmers will not be convinced of this possibility. They know the chess is there, but the question of its source will continue to be an open one.

## THE IMPROVEMENT OF THE ERIE CANAL.

The press of New York state are agitating the improvement and enlargement of the Erie Canal in good earnest. We have stated our conviction before that a ship canal is impracticable and would in no way compensate for the vast outlay required. But the question of improvement is a timely one. The absorption of the West Shore road by the N. Y. Central furnishes an additional and forcible reason why the Erie Canal should be maintained and improved.

The railroad men sneeringly point to the fact that the canal men are worse off than ever, now that the Erie is free. We should think that the railroads would not be anxious to call attention to that aspect of the question in the light of the experiences of the last two years. It is true that the boatmen have not reaped a harvest, but this is not due to any change of heart on the part of railroads. The railroads own their own elevators and can save intermediate charges on grain, while the boatmen are subjected to extortionate charges, both at Buffalo and New York City. Were these charges made reasonable by law, the waterways would have no trouble in making money for the boatmen, even at very moderate charges for grain.

Therefore, the first step to improve the Erie ought to be to smash the elevator rings. Then

the locks should be enlarged and the canal deepened so that a steam tow could haul four boats at one trip. These conditions would enable the boatmen to carry grain at a much less figure, and at the same time make money. This is the true line for agitation.

## "HOT WHEAT."

Of course this cry was to be expected along about the middle of summer. It was a little slow this year, but when it came it produced the same panic that it always has. Chicago has always been noted for the excellent condition in which wheat and corn are kept in her elevators, and with this in view it is difficult to understand why the rumor that showed its head on July 31 should have produced such consternation. It was the same old rumor, and "the same old lie." Always in July and August moisture collects at the top of a bin and heats somewhat, forming a crust, but the grain underneath generally remains cool and sweet. In the present instance there were two bins discovered in different elevators, each of which had heated on top—nothing more. The rumor was started by a New Yorker who had an interest in breaking the market. A score of examinations were made by both interested and disinterested parties, and the unanimous verdict was that there was no hot wheat in the Chicago elevators. Yet the next time some interested speculator shouts "Hot wheat," the same panic will take place. This is a queer world.

The "Champion," advertised elsewhere, is one of the best-known fanning mills made. It is widely used all through the country, in warehouses and elevators, and the manufacturers, The Blake-Beebe Co., of Racine, Wis., make them in seven different sizes, so as to meet all wants. It has numerous good features, and is sold on a guarantee.

SOME few firms in the line of manufacturing have not been affected by the depression, and these generally have held their own by the excellence of their work and the intrinsic merit of the appliances manufactured. One such firm is the Link Belt Machinery Co., of this city, which has witnessed a steady growth, year by year, since its first establishment, and the past year made the largest record of any in the history. Their line of manufactures is too well known to require a detailed statement; and the appreciation in which their goods are held is sufficiently attested by the facts above stated, and the continuously busy aspect which their model shops present.

THE wonderful advance in the art of making perforated sheet metal was strikingly brought to our notice during a recent visit to the new works of the Harrington & King Perforating Co., at Nos. 224 and 226 North Union street, this city. The time was, and not so very long ago, when every manufacturer of machinery requiring perforated metal, manufactured his own, slowly, laboriously, and imperfectly. The present magnitude of the business and its changed conditions is very markedly shown when a building 44 by 160 feet is employed solely in the work of perforating metals for countless uses in milling, mining, grain-handling and various manufactures. There must be over a thousand styles and sizes of perforation, and the uses to which the metal is put are well nigh endless, with new ones appearing every day. Mr. Harrington, who is one of the pioneers in the business, showed us through the company's spacious shops, explaining the different processes, and pointing out the uses of different styles of perforations, some of them very novel. The order-book showed not only an excellent business, but that every state and territory and foreign countries are among the pilgrims that came to this Mecca. With their new shop and ample facilities, the company will no doubt increase their present very large trade.



## Editorial Mention.

READ the advertisements in this issue.

THE country is short on wheat, but long on corn and oats.

WHEAT does not move out with the rapidity which is desired.

A SALE of April corn was made in this market on Aug. 13 at 36½ cents.

LIGHTNING seems to keep up its well-known partiality for grain elevators.

ONE Eastern firm is filling an order for 99 depot scales for grain elevators in the West.

A CORN crop of 2,000,000,000 bushels of corn will reconcile farmers with living for some time yet.

OUR news columns speak sufficiently plain as to whether there is activity in elevator building or not.

CANADIAN vessel-owners have been seriously incommoded by the U. S. Treasury order referred to last month.

It is certainly a favorable sign that at every drop in the wheat market buyers for the export trade take hold.

THE Minnesota Warehouse Commission have decided that the private elevators must take out a public license.

ELEVATOR men will find the text of Judge Miller's decision in the Keokuk Elevator case given on another page.

PERHAPS the largest grain warehouse in the world is Starr's, at Wheatport, Cal. It is 1,000 feet long by 200 feet wide.

THE recent rains in the Northwest damaged barley very greatly in the matter of quality, spotting it badly. The quantity is good.

ST. LOUIS is getting good wheat from Indiana. The wheat through Southern Illinois, Missouri, and Kansas grades lower than was anticipated.

THE old wheat in store in New York is said to have been "doctored to death," and foreign buyers, on this account, are discriminating against old wheat.

IN the coming political campaign in Great Britain the Tories will make an issue of placing a duty on imported breadstuffs and American products generally.

CAPT. H. A. HAWKINS, 248 Randolph street, this city, has been building some model and novel corn cribs for different parties that are a vast improvement on the old article.

THE Chicago Board of Trade has reconsidered its action in changing a car load of flax seed to 28,000 pounds, and the weight will remain as heretofore, 24,000 pounds.

THE plan of forming a pool on grain shipped from Kansas and Nebraska to Colorado points has been discussed by the general managers of the Union Pacific, Santa Fe, Rio Grande, and B. & M.

in Nebraska at their meeting in Chicago last month. But no agreement could be arrived at, owing to the rivalry existing between the Union Pacific and Santa Fe Roads.

THE wire worm is working much damage to corn in the neighborhood of Auburn, Neb., by eating off the roots, which makes the stalk fall over and the leaves dry up.

THREE hundred replies received by a St. Louis milling firm from millers in four of the leading winter wheat growing states confirm the remarkable shortage of this year's crops.

It evidently requires a good deal of room for a Chicago Board of Trade man to spread himself. One of them was arrested by a policeman the other day for obstructing the street near the building.

THE construction of a ship railway to connect the Bay of Fundy with the Gulf of St. Lawrence, by which ships of 1,000 tons and under will have a saving of 600 miles, is said to have been finally decided on.

THE grangers have a warehouse at Port Costa, Cal., built over the water. The reason for building it over the water is that each sack of grain gains from 1½ to 3 pounds. This is a great scheme, verily.

AMERICAN shipping has not utterly disappeared from the face of the waters, croakers to the contrary notwithstanding. Out of 336 wheat cargoes leaving San Francisco and vicinity the last year, 109 left in American vessels.

REPORTS from the neighborhood of Stillwater, Minn., have been received of a small, hard bug eating off the stalk of the grain at the first joint from the ground. If the reports are not exaggerated the damage done by the insect is incalculable.

THERE is still "wow and wumpus" over stealing the quotations of the Chicago Board of Trade. Perhaps Mr. Lindblom is correct in advising that the Committee on Market Quotations be discontinued, and the attempt to guard the quotations be abandoned.

THE recent hot weather paralyzed business for awhile; but it was "glorious for corn." The Frost Mfg. Co., of Galesburg, Ill., write us: "The recent hot spell had quite an effect on our business. During the warmest weather orders were scarce; but the minute it let up we had a rush."

ONE firm at San Francisco has in the past year shipped 109 cargoes of wheat, containing over 6,000,000 centals and valued at \$8,225,106.25. A total of 337 cargoes of wheat containing 15,889,027 centals, valued at \$21,192,146.25, has been shipped from San Francisco during the past year.

A CHICAGO Board of Trade man, writing from Minneapolis, thinks the government estimate of 4 per cent. damage to the crop correct. Farmers, he says, will be forced to market their crop, as trade is paralyzed. The Northern Pacific is making arrangements to move the spring wheat crop early.

THE crop reports made by the agents of the Grand Trunk Railway from nearly every station in Western Ontario are of a very favorable nature, and there are no bad reports from any section of the country west of Toronto. Fall wheat gives a much larger yield per acre than last year, and has been more extensively sown. Spring wheat is not so abundant as last year, but what there is yields a good average crop. Barley promises a fair average yield, and oats will pro-

duce much heavier than for several years past. In short, the crops in Western Ontario never looked better, and they were never so uniformly good as this year.

P. BIRD PRICE has been appointed Chief Grain Inspector by Gov. Oglesby, to succeed Frank Drake. Mr. Price was Chief Grain Inspector during Gov. Cullom's administration, and made an efficient officer. He has entered upon his duties and made some changes in the personnel of his assistants.

ON Aug. 5 Napoleon Booth, at Chicago, brought suit against the defunct Marine, Grain & Stock Exchange, to recover \$30,000 which he put up between August, 1884, and April, 1885, as margins on grain, provisions, and stocks, but which, he claims, was not used as directed. The real demand due is only \$4,461.

MR. ABERNATHEY writes us another interesting letter from Kansas City. By way of a postscript he expresses his candid opinion of the main up-right in general and in elevators in particular. Mr. Abernathy has done much to simplify the building and arranging of small elevators in the West, and what he says is entitled to weight.

AN IMPROVED GRAIN DRIER with many excellent features is advertised in this issue by Mr. Henry G. Morris, of 209 South Third St., Philadelphia. Mr. Morris refers to two of the best-known millers in the East as to the quality of its work. He has issued an illustrated circular, which will be sent to interested parties on application.

GAMBLING in grain has of late assumed large proportions at the Berlin Chamber of Commerce, although the German law exposes the perpetrators to criminal prosecution for fraudulent dealing. From a note of the Minister of Commerce to the Chamber of Commerce, it would appear that the government is determined to stop the practice, even if the criminal law has to be resorted to for the purpose.

THE *Railway Age* says: "Even the wheat crop will be very large in the newer sections of the country, where the money it will bring is most needed, and will at once be put into circulation. The wheat granaries of Texas, Dakota, Oregon, and Washington Territory will burst and overflow with their treasures." We are afraid this last sentence will prove strictly true. It is near the time of year when weak or overcrowded elevators burst their sides.

C. H. SEYB, of High 11, Ill., Secretary of the Illinois Millers' Association, says: "I returned late last night from my Missouri and Kansas explorations. I feel bluer than ever because the bad reports from there are surpassed by the real state of affairs. There is less wheat and of decidedly poorer quality than I looked for. I have abandoned all idea of getting any wheat from Western Missouri or from Kansas for milling purposes, so at last our milling crowd has settled down to do absolutely nothing until the crop of 1886 becomes available."

THE Railroad and Warehouse Commissioners of Minnesota are bound by the new law to visit the various railway stations of the country at least once in three months. On one of their recent trips over the Southern Minnesota Railroad, when not only the depots but the elevators were also inspected, the commissioners made the discovery that some of the grain buyers exacted 52 pounds to the bushel of barley, and 62 pounds to the bushel of wheat. The standard weight prescribed by the laws of the state is 48 pounds of barley and 60 pounds of wheat to the bushel. Apparently this was a violation of the law; but it appears that there is no penalty provided in the statute for these arbitrary acts. Of course, in open market the omission makes little difference to the seller, as he would not sell where the two or four



extra pounds were exacted; but in out-of-the-way places the seller would have no option but to submit. The buyers, on the other hand, claim that the extra weight is taken as compensation for extra dirt.

GRAIN men should notice the card of H. J. Deal, of Bucyrus, Ohio, advertising his Improved Grain Tester. He is meeting with excellent success with this appliance, and has furnished them to a large number of the best mills and elevators in the country. He is confident that users will find this the best tester made. He offers special inducements for cash sales, and will be pleased to hear from grain men.

OWING to the O'Leary Pinch Bar or Car Starter being an infringement on the Champion Bar, the patent on the former has been assigned to the Webster & Comstock Mfg. Co. of this city, the owners of the Champion. This is a good way to settle disputes about patents. The O'Leary is a heavier bar than the Champion, and Messrs. Webster & Comstock Mfg. Co. will furnish either, as may be desired. Both are excellent appliances, and are sold at a moderate price.

THE Illinois Railroad and Warehouse Commissioners passed the following resolutions at their Springfield meeting:

*Resolved.* That hereafter all appointments to the position of helper in the State Grain Inspection Department shall be made only after sixty days' trial, and then only upon a written indorsement of the qualifications of the candidate by the chief inspector of grain, and his statement that such candidate is of temperate habits, good moral character, and not over 35 years of age.

*Resolved.* That no claim for damages on account of alleged error in the inspection of any grain (except grain inspected from public warehouses in accordance with law) will hereafter be entertained or allowed by the Board of Railroad or Warehouse Commissioners unless complaint of such inspection shall be made to the chief inspector of grain before the grain in question shall leave the jurisdiction of the department.

### "THE GRAIN-DEALING CONSPIRACY."

Under this startling title a correspondent of the *Kansas Farmer* charges the Boards of Trade with wantonly robbing the farmers by "bearing" the price of his corn and wheat. To his comprehension all speculators and commission men are on the same side, with no "bulls" to counteract their influence. He declares that by the fiat of the Boards of Trade, corn in Kansas that was actually selling for 50 cents per bushel, was brought down to 20 cents. Fifty-seven million dollars, he says, were shrunk out of the corn crop of Kansas; and his language is correspondingly radical and inflammatory; in fact he might give lessons to the anarchists of Chicago.

But it is his remedy for these evils that interests us most. We have not space to give it in full, but a part of his scheme is as follows:

The Legislature shall create a board of commissioners on fixed prices, whose duty shall be to determine the cost of raising corn, wheat, broom corn and wool on the average farm in Kansas, giving to the producers same for labor, interest on capital, wear and waste of machinery that other men get in other avocations of life. Having thus found the cost, then, if the dealer does not pay the price, let the governor authorize the commission to enter the market and buy and hold till the consumer will pay the price, making the whole sum of money obtained by sale of one-half the issue subject to draft of the commission. When they sell, add cost of handling and interest on money at rate of 4 per cent. per annum. This will checkmate the Board of Trade men, and it transfers the power to fix the price from Liverpool to Topeka, which will be more satisfactory to producers in Kansas. A state bank of issue located in Topeka would be a source of pride and profit to the city, which would draw business men from every part of the state as the magnet draws the steel.

Here is your great patent legislative Nostrumine, guaranteed to cure the farmers' ills! It is a curious perversity of the human mind that invariably looks to the state to cure all ills by legislation. Despite failure in repeated instances, the power of the legislature is still invoked and will be, we suppose, for all time, to correct evils which laws cannot correct. In this instance the farmer wishes to make his state government guarantee

prices. This, O, Granger friend, no government can do except at the point of the bayonet. Demand and supply settle that question, and even the state of Kansas, great and powerful as she is, does not own money enough, or raise grain enough, to "bull" (or rather "bulldoze") the world's markets.

But the planner of that scheme must have a curious squint in his moral eye. He believes in the state making prices good. He believes in making food dear to the consumer that the farmer can have a good price. In fact, he wants to take it out "of the other fellow" by legislation. Only one question and we will leave this schemer to meditate on his wrongs and plan their righting. When wheat fails in Kansas, and is abundant elsewhere, how could the legislature secure the cost price for the Kansas farmer? We fear the planner will have to appeal to a still higher authority than the legislature of Kansas before the law of supply and demand can be changed, even in the interest of the down-trodden farmer.

THE dockage question in Minnesota is thus stated by Commissioner Murdock:

The commissioners propose to have the grain inspector grade the cars as it is now done. To employ for each elevator an additional inspector, who shall be called the "inspector of cleaning," who shall decide the amount of dirt that shall be taken out of each car which the grain inspector shall have marked "to clean." The elevator will be obliged to clean out that amount, and to give receipt for the net amount of grain of the improved grade. The elevator shall be allowed to employ an "inspector of cleaning" who may act with the state inspector and represent the elevator, and in all cases where they cannot agree the grain should be absolutely cleaned before the shrinkage is determined upon. The elevator shall be allowed to charge one-half per cent per bushel for this cleaning. Uncleaned grain will thus be certified to by the inspector as such, and the state grades upon such wheat depends upon the grain being cleaned in a public warehouse under state supervision.

CAPT. DE PUY, the Erie boatman, indicts the present state of affairs, vigorously, in *Brad-streets'* as follows:

Unless port charges in New York and Buffalo are reduced to correspond with those in other competing cities, the state is ruined. In the first three months of 1885 Baltimore received more wheat than New York did. At present, railroad freights on grain shipped from Buffalo are just the same to Baltimore and Philadelphia as they are to New York City. This fact is enough to convince the people that the railroads centering in Buffalo do not care a groat for the state and city of New York. It is hard for us to know that after grain is delivered in Buffalo (the west side of our state) it should be railroaded out of the state to Boston, Baltimore and Philadelphia. The cause of all this diversion of grain away from its old, natural channel can be traced to exorbitant port charges in New York and Buffalo.

If Buffalo and New York can afford to play hog, the rest of the country will try to stand it.

At the meeting of the Montreal Harbor Board on Aug. 13, the chairman, in speaking of the reduction of canal tolls, said that up to the time when the last reduction was made, 500,000 bushels more wheat had been received than at the same time last year; but since the reduction of the tolls there has been a slight falling off. The exports of peas, oats, barley and rye during the last three years were, to Aug. 5, 905,098 bushels in 1883; 1,251,164 in 1884, and 2,256,290 in 1885, showing a very large increase of 1885 over the preceding years, these grains being purely Canadian production. The export of corn was 1,853,846 bushels in 1883; 2,407,386 bushels last year, and this year only 1,062,712 bushels. Wheat shows an export of 2,426,585 bushels this year against 1,689,073 bushels last year. Up to Aug. 5, Montreal had received 3,415,802 bushels of wheat; no less than 2,058,319 bushels by rail, and only 1,357,483 bushels by river and canal. It is hard to say whether the reduction made in the canal tolls will increase the transport of grain by river. Wheat is now shipped from Duluth to Montreal at the rate of \$1.17 per ton of 2,000 pounds, not including the tolls, while \$2.50 per ton of 2,240 pounds are charged by the railroad from Montreal to Port Arthur. Thus the rails will prove keen competitors to the water route, unless the latter can reduce the freight rates it has been charging heretofore.

### THE FINAL WHEAT REPORT.

The final report, which has just been published by S. W. Talmadge, of Milwaukee, Wis., on the condition of this year's crop, as compared to the crop of 1884, places the total shortage at 204,000,000 bushels. In winter wheat there is no increase of the July figures, except in Indiana. As to spring wheat there is a change of estimate only in Minnesota, where the crop has lately been much damaged. The figures given in the comparative crop table below for 1884 are not those of Prof. Dodge, statistician of the department at Washington, there being so many gross errors in his final report for 1884.

They have been compiled from the official reports of the different State Agricultural Departments, which, in Mr. Talmadge's opinion, have been more carefully compiled than those of the government department. Prof. Dodge, f. i., places the total yield of 1884 at 513,000,000 bushels, against 529,000,000 bushels as based upon the reports of the State Agricultural Associations.

Following is the comparative statement of the yield for 1884 and 1885:

SPRING WHEAT.		
	1885. Bushels.	1884. Bushels.
Minnesota.....	29,500,000	41,000,000
Iowa.....	29,500,000	31,000,000
Dakota.....	24,000,000	22,000,000
Nebraska.....	16,000,000	18,000,000
Wisconsin.....	14,000,000	20,000,000
Totals.....	113,000,000	132,000,000

WINTER WHEAT.		
	1885. Bushels.	1884. Bushels.
California.....	26,000,000	58,000,000
Michigan.....	25,500,000	30,000,000
Indiana.....	24,000,000	34,000,000
Ohio.....	19,000,000	41,000,000
Oregon.....	17,000,000	15,000,000
Pennsylvania.....	13,000,000	22,000,000
Kansas.....	11,500,000	48,000,000
Missouri.....	11,000,000	28,000,000
New York.....	11,000,000	13,000,000
Illinois.....	10,000,000	33,000,000
Texas.....	5,000,000	5,000,000
Maryland.....	5,000,000	8,000,000
Washington.....	5,000,000	4,000,000
Kentucky.....	3,000,000	13,500,000
Colorado.....	3,000,000	2,000,000
Tennessee.....	2,600,000	9,000,000
North Carolina.....	2,400,000	5,000,000
Virginia.....	2,500,000	8,000,000
Georgia.....	2,000,000	3,000,000
South Carolina.....	1,500,000	2,000,000
New Jersey.....	1,500,000	2,000,000
Utah.....	1,500,000	1,500,000
Arkansas.....	1,300,000	2,000,000
West Virginia.....	1,200,000	3,000,000
Alabama.....	1,200,000	1,500,000
Delaware.....	1,000,000	1,200,000
New Mexico.....	1,000,000	1,000,000
Montana.....	1,000,000	1,000,000
Idaho.....	1,000,000	1,000,000
Other states and territories.....	1,300,000	1,300,000
Totals.....	212,000,000	397,000,000

RECAPITULATION		Bushels.
Spring wheat crop, 1884.....		132,000,000
Spring wheat crop, 1885.....		113,000,000
Shortage in spring wheat.....		19,000,000
Winter wheat crop, 1884.....		397,000,000
Winter wheat crop, 1885.....		212,000,000
Shortage in winter wheat.....		185,000,000
Total crop, 1884.....		529,000,000
Total crop, 1885.....		325,000,000
Total shortage.....		204,000,000
Average crop for five years.....		462,000,000
Shortage compared with average five years.....		137,000,000

THE freight rate of the Northern Pacific is now as low as that by the ocean route via Cape Horn to Europe, so that a large proportion of the abundant wheat crop of Eastern Oregon and Washington territory may be expected to come eastward through Duluth to the Atlantic seaboard.



## NOTES FROM THE EXCHANGES

Tickets of membership on the New York Produce Exchange have been ruling at about \$2,700.

The only safe and legal manner in which the members of the present Board of Trade can build their new building seems to lie through the formation of a new stock company, in which every member of the old Board of Trade shall own at least two shares. This matter was fully discussed at the meeting of the committee having the matter in charge this week, and the determination reached to push matters forward as rapidly as possible. —*Kansas City Commercial*.

Some members of the Open Board have been suspended for "wash" trading. "Wash" trades are simply sham trades made between two parties having an understanding with one another, for the purpose of influencing the market. The bogus seller and buyer thus create a quotation which they use to their own advantage, and by arrangement scratch or "wash" out the memorandum from their trading cards. Legitimate operators are frequently victimized by this "washing" process.

The bucket-shops have again been stealing quotations from the Chicago Board of Trade. They cut the wires and thought they had ended it, but the bucket-shops continued to receive quotations. A man was discovered in a room in the Traders' Building, hid behind a pile of bags in the window, watching his confederate, who stood on the edge of the wheat pit, and, whenever prices went up, he turned to the right, when down to the left. He was promptly bounced, and that source of information cut off.

Robert Lindblom, a well-known member of the Chicago Board of Trade, in an open letter to the Committee on Revision of Rules, advocates the repeal of the rule setting down the amount a member can charge for doing business for another person. This rule, he says, is very obnoxious to the law-abiding members and futile in its object, benefiting only outside sharpers, who sneakily violate it. He further recommends the abolition of the Committee on Market Reports, which was organized to suppress the bucket shops, but has utterly failed to do so, because it is absolutely impossible to suppress them by "trying to bottle up quotations," and even if this could be done, other boards of trade would only be too glad to furnish quotations for half the money offered to the Chicago Board, which thereby would be deprived of the supremacy it now holds over the Boards of other cities. Under the present rules, the committee has the power of withholding from a man who tries to open outside business connections, the market quotations, without even giving a reason for it. The system is one of spysim, which is repugnant to free ideas, and worse than that, it is expensive and useless, inimical to the business interest, and unable to accomplish the object it was created for.

A New York paper says: "There seems to be a growing discontent at the result of the life insurance experiment, and many of the junior members of the Exchange say that the Exchange made a mistake when it went into the life insurance scheme, and that it should leave that branch of the business to the regular insurance companies. The young men say that the cost of the insurance is burdensome and more expensive than in the regular companies, and that, no matter how old a man may be when he buys a membership in the Exchange, or what his state of health may be, his assessments for the life insurance are no higher than young and healthy men are obliged to pay. Leaving out the question of the health of the members, the taxing of old and young alike is, it is claimed, unjust, and is never done by the regular insurance companies. 'The death rate in the Produce Exchange,' said a young broker yesterday, 'is remarkably heavy. During one week last winter we had six death assessments, or one every day, and the average rate is about forty deaths a year, which is in rather startling contrast to the Cotton Exchange, where they have had, I understand, only six deaths in three years, and the amount of insurance is \$4,650, while ours is only \$5,000. The frequency with which we are assessed in our Exchange makes the young fellows tired.' Policyholders in the regular companies have the choice of becoming possessed, in time, of a paid-up policy, or that the return of dividends will take care of it. But with us the assessments go on at an increasing rate. During the year ending May 1, 1885, according to the statement of ex-President Herrick, there were forty-four deaths. Here is an interesting and instructive little table giving a comparison of the cost of insurance in the different Exchanges during the last year: The Stock Exchange, with 1100 members, gives \$10,000 life insurance at a cost of about \$50 a year. The Consolidated Stock and Petroleum Exchange, with about 2,500 members, gives about \$8,000 insurance for about \$80 a year. The Cotton Exchange, 465 members, gives \$4,650 insurance at a cost of less than \$30. But the Produce Exchange, with its 3,000 members, gives \$5,000 insurance—less than any but the Cotton Exchange—at a cost of \$132 during the year ending May 1. This is nearly five times as much as the Cotton Exchange for only \$350 more insurance. Why, our flag on the tower is at half-mast about three

days out of six. Oh, it's an unhealthy place down here, sure. There must be malaria in the grain, or perhaps it's a sort of epidemic of hog cholera. Seriously, though, something has got to be done. The clause in the charter making participation in the gratuity life insurance system compulsory ought to be abolished. Young and old should not be compelled to come in on the same footing, whether they want to or not. There is talk among the young men of organizing a movement for the repeal of the compulsory insurance clause. It has also been proposed to unite the members of several Exchanges in an insurance company, and to separate the business of life insurance entirely from the Exchanges, where it has no place."

### BUFFALO ELEVATORS.

The Lake Carriers' Association, in following up the policy for which it has been organized, has recognized the fact that the Buffalo elevators in their exorbitant charges for handling grain conduce much to wipe out the small profits of carriers, and are therefore proper objects for immediate attention. Last season these elevators, offered as a pretext for the exorbitant rates charged by them, that the royalty they were obliged to pay on the use of the steam shovels necessitated the high rates then prevailing, and vessel men were moved to use their influence in defeating the extension of the patents on the shovels, in which they were successful, as those patents had already been extended several times. But it appears to-day that this action on the part of owners has given them no permanent relief.

It was hoped by some that the new elevating company, talked of some months ago, would really become a matter of fact and succeed in breaking the elevating ring, but that has apparently been abandoned for reasons outlined in these columns last April. Every move made heretofore in this direction has proved abortive for the fact that the old combination has acquired everything in the shape of elevators that has had the temerity to loom up against its sky, and consigned to idleness the machinery which was to be used to bring them to terms.

The Lake Carriers' Association now promises to accomplish the desirable end of bringing about a reduction of charges, and correspondence has passed between the managers of the association and the Western Elevating Co. The association asks for a reduction of 50 per cent., which the company refuses to grant, but agrees to a rebate of 25 per cent., with certain strictures attached, which show that the apparent concession is simply a dodge and evidences the fact that the company will not give up its advantage until it is compelled to. What line of action the association will now bring to bear we cannot say. Appended is the correspondence: To the Executive Committee of the Western Elevating Company:

DEAR SIRS:—At a meeting of the board of managers of the Lake Carriers' Association, held at Buffalo on Thursday, 23d inst., the undersigned were appointed a committee of the board to consult with the Western Elevating Company with a view to securing a reduction in the shoveling and elevating charges. We respectfully submit that in view of the present deplorable depression in the lake carrying trade it is but fair that the elevating interests, which are so closely connected with our lake commerce, should bear their part in assisting this business to a living basis. We submit that the elevator charges remain on the same basis as in prosperous years, while the expenses of the elevators are lessened. Our request is this: That the charges for steam shoveling be reduced \$1 per 1,000. We consider this request more than warranted by the present business conditions, and trust that it will be received in a spirit of equity and fairness, and that a wisely liberal policy will insure prompt compliance on your part.

W. F. HENRY,  
DAVID DONALDSON,  
FRANK PERREW,  
JAMES ASH,  
Committee L. C. A.

Buffalo, July 25, 1885.

To this the elevator authorities reply as follows:

GENTLEMEN:—Your communication of the 25th inst., asking that in view of the present depressed condition of the lake carrying trade a reduction of \$1 per 1,000 bushels be made to vessels is received.

After carefully considering your request, our executive committee have instructed me to say that by their recent action in reducing the storage to one-half the usual rate, they have shown already a liberal spirit and have made a large concession to the trade, and their action has resulted in a large increase in the movements of grain.

While recognizing the fact that they should do what they can, in view of the great depression in the carrying trade, to assist in bringing about a change for the better, still they do not see how in justice to the interests they represent they can consistently assent to your request.

They have, however, in view of the conditions of business referred to above—although believing that any reduction will accrue to the benefit of the Western men and not to the vessels—resolved to allow to the vessel owners a rebate of 50 cents per 1,000 bushels on grain elevated by us during the month of August, providing that your association advise us that this reduction will be accepted as a satisfactory conclusion of the whole matter.

The above proposition is based on the present rates of elevating being maintained, and in case they are not our committee reserves the right to cancel this agreement at any time.

Yours,

P. G. COOK, JR.,  
Secretary W. E. Co.

Buffalo, July 31.

This reply was referred to the board of managers of the L. C. A., who instructed their committee to decline this offer and renew their original request.

As we have said, the time has come when this evil should be abated, when an aggressive influence should be brought to bear against this ring, and it is to be hoped that every vessel owner will unite in the righteous move just inaugurated by the Lake Carriers' Association, for the lower the price of wheat and corn the larger the proportion which is taken by the elevators. If satisfactory results can not be obtained by the means adopted by the association of Lake Carriers, it would be well to go before the New York State Legislature and push to an issue the measures which failed last winter by reason

of half-hearted support. As the Supreme Court has decided that state legislatures have the necessary jurisdiction and power to regulate extortionate charges of warehouses, we suggest the propriety of preferring such charges against the elevating ring before the state legislature, and believe in ultimate success, if they are well sustained.—*Marine Record*.

### EXPORTS OF BREADSTUFFS.

The following are the official figures, as shown by the Bureau of Statistics, of the exports of breadstuffs from the United States for the fiscal year ending June 30, 1885, and compared with 1884:

ARTICLES.	Twelve months ending June 30.	
	1885.	1884.
Barley, bus.	629,130	724,955
Bread and biscuit, lbs.	16,471,972	17,580,740
Indian corn, bus.	51,834,416	45,247,490
Indian corn meal, bbls.	260,510	252,770
Oats, bus.	4,191,692	1,760,370
Oatmeal, lbs.	36,205,413	27,256,432
Rye, bus.	2,950,558	6,220,200
Rye flour, bbls.	3,972	4,506
Wheat, bus.	84,653,714	70,349,011
Wheat flour, bbls.	10,647,971	9,132,360

The articles above showing increase for the year are corn, oats, oatmeal, wheat, and flour. By reducing the flour to bushels the aggregate exports of wheat for the year equal 132,569,934 bushels, against 111,534,182 bushels the previous fiscal year. The total value of the wheat and flour exported for the year ending June 30, 1885, was \$125,033,690, equal to 9436 cents per bushel, against \$126,166,374 in 1884, equal to \$113.11 per bushel—an average decrease per bushel in the value of wheat exported in 1885 of 18.75 cents as compared with 1884.

### CORN IN THE UNITED STATES.

As a factor in the advancement of the material interests of America, and in the promotion of the general welfare of its people, the production of maize, or Indian corn, has probably played quite as important a part as any other one element.

Looking over the record of many years past, we find that while the production of this most prolific and useful staple has within less than a score of years risen from 300,000,000 bushels to nearly 2,000,000,000, the percentage of our exportation of it has in an almost inverse ratio, declined. This, in so far as it goes, is encouraging, since, as this relative declension has been going on, the exports of the products of corn—meats, lard, etc., have been vastly enlarged. It shows that the production of live stock has outstripped the needs of our rapidly increasing population, and kept ahead of the growth of those things upon which domestic animals feed; and that thus we are marketing the cereal products of our soil in a manufactured shape instead of the raw. It is this utilization of our grain that enriches our lands, and in many ways, necessarily, the material wealth and prosperity of our people. But even this remarkable and gratifying progress should not satisfy us. Instead of thus profiting from a part, we should profit from the whole. The true policy of the nation is to send out the products of its soil in a manufactured form. Why do we export in a raw shape five-sixths or five-sevenths of a 6,000,000-bale cotton crop, valued at, say, \$125,000,000 and send out annually in a manufactured shape less than a couple of million dollars' worth, while we are importing \$40,000,000 of similar kinds of goods—who can tell? And echo answers, who?

Our soil and climate are especially adapted to an immense production of Indian corn. In these respects nearly all Western and Central Europe cannot compete—may be counted out. Unlike the marvelous increase in the area which in the past decade has been devoted to its culture, on this side of the Atlantic it has there been contracted. Their home resources for bread and meat are steadily contracting, whilst those of America are far more rapidly expanding. The point we wish more particularly to make is to retain at home everything in the shape of cereals that cannot be converted into a compact manufactured form for export. Let us keep at home all that our land will produce, the grain itself, the excrement of cattle, the offal of all animals, and even their horns and bones. Give Europe bread and meat, but let the profits of the commission from the beginning to the end be placed to the credit of the loss and gain account of America and not to that of the foreigner. This is "protection" in its essence.—*N. Y. Produce Exchange Reporter*.

Steps have been taken by the Omaha Railroad to increase the facilities for handling grain at Duluth, Minn. That port has lately become a very important one on Lake Superior, and, with the connection at Duluth and Superior with the Northern Pacific Road, the Omaha is expecting to handle considerable grain at Washburn, where an elevator is to be erected with 800,000 bushels capacity. The contract has been let to J. T. Moulton & Sons, Chicago, and the elevator must be completed before the opening of navigation next season.

Mons. De Lesseps, the famous engineer, building the Panama Canal, appears rather sanguine in saying that the canal will be finished in 1888. It is a generally admitted fact, corroborated by the testimony of unprejudiced engineers, who have been there, that the work can not possibly be done in ten years, provided the project does not turn out a complete failure, after all.



## Canals and Marine.

The St. Clair Canal improvement is progressing very rapidly. Already the areas between the prolongation of the inner faces of the dykes and the sixteen-foot curbs at the head and foot of the canal have been dredged. During the past month 28,426 cubic yards of material have been removed by the dredges. The channel below the entrance to the canal is now restored to its original width and depth, being 300 feet wide and sixteen feet deep.

The long-projected scheme of constructing, through the peninsula of Schleswig-Holstein, Germany, a canal affording easy passage between the Baltic and North Seas to the very largest vessels, is likely to be realized very soon. The cost of the canal is estimated at about \$40,000,000, which is to be borne by the German Empire. The new waterway will make Kiel one of its termini. From that port it will run straight to the estuary of the Elbe, in a southerly direction, the distance to be traversed being about sixty miles. The canal having been looked forward to by all commercial nations as a great shipping facility, its final construction will be hailed with satisfaction.

Governor Hubbard, of Minnesota, has issued a call for a Western waterway convention, to be held at St. Paul Sept. 3, 1885, and he especially requests the Governors of the states of Illinois, Missouri, Kansas, Nebraska, Iowa, Wisconsin, and of the territories of Dakota and Montana to attend in person, and aid in securing a full representation of their states, commercial bodies and cities. He also cordially invites the Senators and Representatives of Congress of these states and territories to be present and assist in the work of the convention. The object of the convention is to "formulate a most earnest demand upon Congress for such appropriations of money as may be required to insure at the earliest day practicable the opening of our rivers to an untrammelled commerce to tidewater."

In discussing the Erie Canal system, a correspondent to *The Husbandman* (Elmira, N. Y.), says that the necessity of improving the canal is generally acknowledged, no substantial meliorations having been made during the last twenty years. The locks, which have become too small for the immense traffic, should be enlarged to the double length to allow a quicker passage of the boats. Next, the slow and expensive horse power will have to be supplanted by steam, which, however, can only be done by increasing the depth of the water by two feet at least. With these improvements a steamer could tug three vessels at one time, and at greater speed than that of a canal horse. The canal charges would thereby be reduced to more than one-third the present cost, so that a bushel of grain could be carried from Chicago to New York for three cents, the present rate being six cents. Improvements there must be, to be sure. Opinions, however, differ widely as to whether they are to be made by the state or federal government. Many are in favor of the latter scheme, without being aware that in supporting it they would be slapping their own faces. The Erie Canal is unquestionably a principal source of the wealth and commercial supremacy of the state of New York, and will become more so after the above improvements have been made. It would be a most foolish thing to allow the federal government to obtain jurisdiction and control over the canal by making the needed improvements. All the large Atlantic ports are rivals of New York for the vast Western trade. Now, in the United States Senate New England has twelve senators, and New York but two. Would not the rival states of New York combine to manage the canal so as to divert from the Erie route the immense trade it now has to their own ports? New York cannot afford to yield the enormous advantages it derives and will derive from her canal, merely to benefit other Eastern states. Therefore the improvements should be made speedily, but only by that state which built the canal at her own cost and to her own profit.

Owing to a mistake in the order in council passed by the Dominion Government with reference to the canal tolls, by which the St. Lawrence canal tolls were overlooked, a new order in council has been passed which fixes tolls on all grains passing through canals from Lake Erie to Montreal at two cents per ton. The grain paying two cents per ton on the Welland Canal goes free through the St. Lawrence River Canal. The order also reduces the tolls on grain passing through the St. Lawrence River Canals from 15 cents to 2 cents per ton. Thus grain passing through Lake Ontario which has not passed through the Welland Canal, will pay a toll of 2 cents in St. Lawrence Canals. Grain passing westward through both the Welland and St. Lawrence Canals, or through either of them alone, shall pay 2 cents per ton.

A call has just been issued by the Secretary of the New York Board of Trade and Transportation for a conference of canalmen and other persons having the best interests of New York state at heart, to assemble at Utica on Aug. 19. The chief purpose of the conference is to form plans for a permanent organization to secure the improvement of the New York state canals. The means best adapted to achieve this end will be made a

subject of general discussion, and the results of the conference are likely to have no little influence on the future management of the canals of the state. In a recent letter to Mr. Gardner, the Secretary of the Board of Trade of this city, ex-Governor Horatio Seymour gives his views of the best means for attaining the end desired. He expresses emphatically his disbelief in the practicability of making a ship canal through the state large enough to allow lake vessels to navigate it. He says that no vessel can be constructed to navigate those waters which could do that better than the present canal boats in proportion to their weight and size. The lengthening and enlarging of the locks and the raising of the banks, so as to allow a great depth of water, are among his suggestions. He also declares himself opposed to the acceptance by the state of any aid from the general government for the purpose of enlarging the canals, and says that it would cost the state more indirectly to accept that aid than it would to raise funds by home legislation. Governor Seymour thinks that as New York had in the beginning to incur all the expense of building the canal without aid from the general government, notwithstanding the appeals which were made, it is now rather late in the day for this state to ask financial aid in order to complete certain necessary improvements of the canals.

### A WASTED CHANCE.

Mr. Bascom (a broker)—Had a splendid time. Killed lots of game.

Mr. White (another broker)—What did you kill?

Mr. Bascom (with visible pride)—A bear.

Mr. White (who is short on the market)—You killed a bear? What a bloody fool! When you were about it, why didn't you kill a bull?—*New York Graphic*.

### RULE FOR INSPECTING UNCLEANED GRAIN.

The Railroad Commissioners of Minnesota have promulgated the following rule for inspecting uncleaned grain: In inspecting wheat that has not been properly cleaned the track inspector will determine what grade such wheat shall be when properly cleaned, and shall state upon his inspection ticket "No. 1 hard," "No. 1 Northern," etc., "to clean," which shall signify the grade such wheat shall be if cleaned in a public warehouse under state supervision. There shall be placed in each public warehouse in Duluth an inspector, whose duty it shall be to supervise the cleaning of such grain as may come into such house marked "To clean" by track inspectors. Such inspector will determine, by actual test with suitable cleaning apparatus, the average amount of dirt and foul seed per bushel that it will be necessary to remove from such lot of grain to prepare it for the grade which said track inspector has fixed upon. After such test, carefully made, he shall state upon the inspection ticket the number of pounds or fractions thereof per bushel which such wheat shrinks in the process of cleaning. The public warehousemen may, if they so desire, have a man present to represent the interest of the warehousemen during such contests, and in case the person representing the warehouseman and the inspector cannot agree upon shrinkage in any lot of grain, such lot of grain shall be immediately and entirely cleaned before such shrinkage shall be determined and certified. After such shrinkage has been determined each warehouseman will be held responsible to clean such grain and make it fit and suitable for the grade fixed upon it by the track inspector, and shall issue a warehouse receipt for such cleaned wheat upon the request of the owner thereof. The warehouseman shall receive one-half cent per bushel for such cleaning.

### HANDLING GRAIN AT NEW YORK.

Capt. M. DePuy, in a letter to the *Commercial Bulletin*, explains why the Erie Canal is disappointing to the people of New York state, attributing it to the exorbitant port charges at New York and Buffalo, which he says "are enough to turn every bushel of grain away from the state and city of New York altogether."

New York charges per 1,000 bushels for trimming grain in ships are \$7. In Chicago the contract price with all the propeller lines last season was seventy-five cents per 1,000.

New York charges for discharging canal boats per 1,000 bushels, \$5. Chicago charges for same services, \$2.

At Buffalo the aggregate elevator charges for discharging vessels are \$5.75 per 1,000 bushels, when \$2 per 1,000 pays the bill in any of our rival Canadian ports—showing an over-exaction at the Buffalo end of the canal of \$3.75 on every 1,000 bushels.

At Buffalo there are thirty-eight elevators, and they seldom use over eight of them at one time. But they make the grain passing through that port pay a margin to the entire thirty-eight elevators, notwithstanding some of them never turned a wheel. Mr. Edward Annan, of New York, admits that his elevators paid 9 per cent. dividends in 1884. Considering that these elevators were valued at double the cost of building new ones, and that part of them did not handle a bushel of grain last season, and that those which were in use were worked to only one-eighth of their capacity, prove that the elevator monopolies are taking advantage of the people who are supporting a free canal, and of the boatmen who are freighting from Buffalo to New York for 2½ cents per bushel. The insurance companies at Buffalo continue to take advantage of the boatmen, notwithstanding there

is a law prohibiting their rebating to commission dealers. At present the regular rebate is \$3.50 on a boat-load of wheat and \$2.50 on a boat-load of corn. In every one of these cases the boatmen suffer directly, and the people suffer indirectly.

### THE PEASANT WHO WAS SHORT ON WHEAT.

A peasant who was short on wheat for May delivery, and found ruin staring him in the face, betook himself to the cave of a philosopher and said:

"Oh, wise man, I am half a million bushels of wheat short on May delivery. I came to ask help of the gods through you."

"Know ye, my friend," replied the old man as he scratched his chilblains in the softest manner, "that the gods render aid only when the lawyers have given up the case."

The next morning the peasant was in Canada.

MORAL.

And his lawyer settled all claims for forty cents on the dollar.—*Detroit Free Press*.

## Special Notices.

**The Chicago Scale Co.** sell Scales of all kinds, also Portable Forges and Blacksmiths' Tools of all descriptions at about one-half usual prices. Buyers will save money by sending for their price list.

### TO ELEVATOR AND MILL MEN.

A young man would like a situation in elevator or feed mill. Have had ten years' experience in the elevator and grain business and produce commission. Good references furnished. Address

Box 458, Ypsilanti, Mich.

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### FOR SALE CHEAP.

A new Fanning Mill. For particulars address M., care AMERICAN ELEVATOR AND GRAIN TRADE, Chicago, Ill.

### FOR SALE CHEAP.

Elevator of 80,000 bushels' capacity, with warehouse, office, and scales. New machinery; hay press; coal house (for coal trade), etc. Address

C. T. PARSONS, Chillicothe, Mo.

### FOR SALE.

An elevator situated in the best farming country in Kansas. Also city dwelling property. All for \$10,000. For full description and terms write to the

OLATHE ELEVATOR, Olathe, Kan.

### GREAT BARGAIN.

Situated on a trunk line, in Ohio and Indiana, in good towns, four nearly new grain warehouses, strictly first-class throughout; for sale cheap. Best of reasons given for wishing to sell. Address

E. E. Co., care AMERICAN ELEVATOR AND GRAIN TRADE, Chicago, Ill.

### FOR SALE.

Grain elevator in a live town in Western Iowa, with two branch offices if desired. Will be able to handle 250,000 to 300,000 bushels of corn this season, at station where elevator is located; other two, about 100,000 each. Reason for selling, desire to retire from active business. Address

D., care AMERICAN ELEVATOR AND GRAIN TRADE, Chicago, Ill.

### FOR SALE CHEAP.

In Central Illinois, a good steam elevator, equipped with the best machinery, sheller, grain cleaner, mill for grinding meal and feed, three dumps, etc. Capacity of elevator, 10,000 bushels; of corn cribs, 35,000 bushels; thirty miles from Peoria. This station ships more grain than any other on the road. Only two elevators here. Price, \$2,500; no less. Good reason for selling. Address

MILLER BROS., Emden, Ill.

### FOR SALE—NEW STEAM ELEVATOR.

An Iowa elevator, situated on the C., B. & Q. Railroad. Finest corn district in the state. It is furnished with all the improved machinery; drag belt, crib, three dumps for ear-corn, dumps for small grain; 10,000 bushels capacity and 20,000 bushels crib room. Office and scale on corner lot, with stock yard attached. Elevator has good trade. Prospects for crop are first-class. Address

Box 91, Afton, Iowa.



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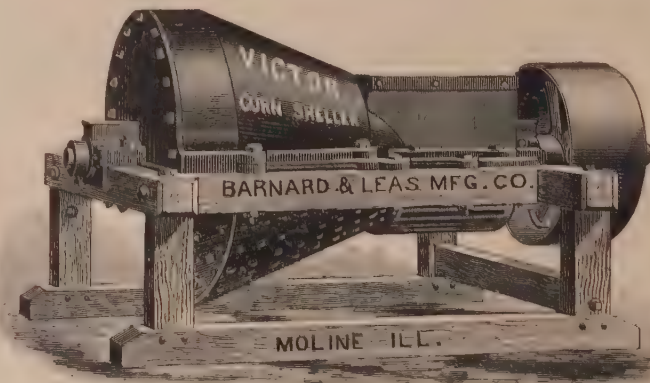
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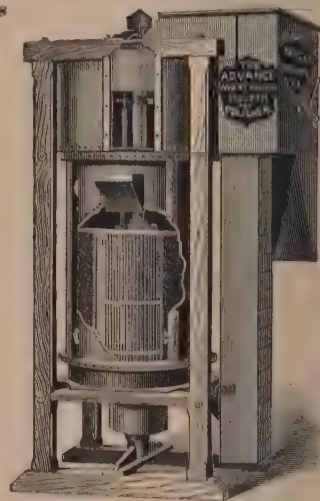
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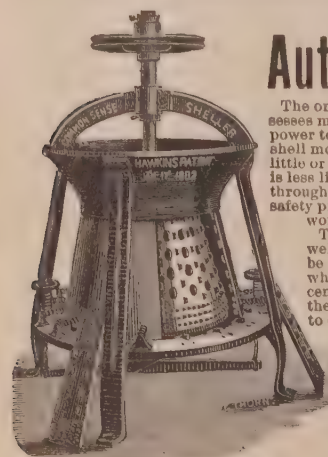
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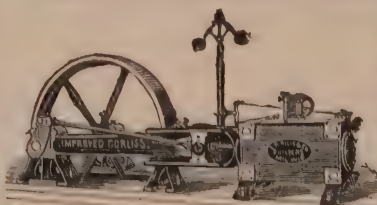
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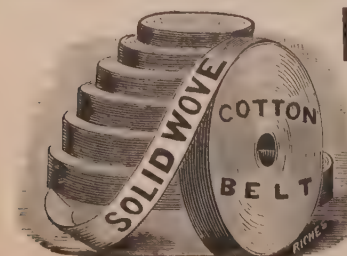
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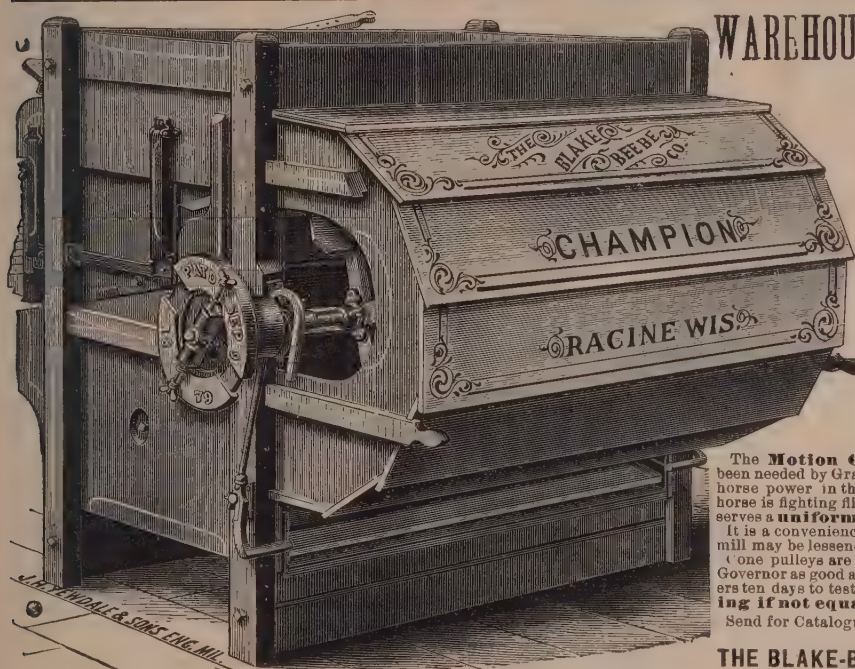
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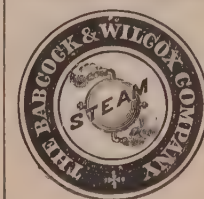
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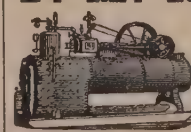
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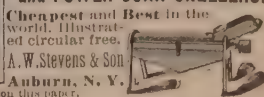
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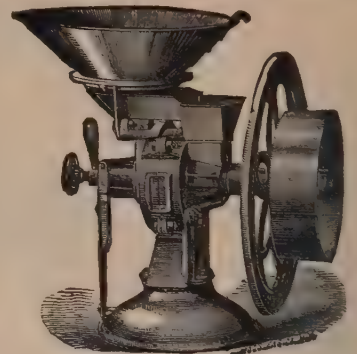
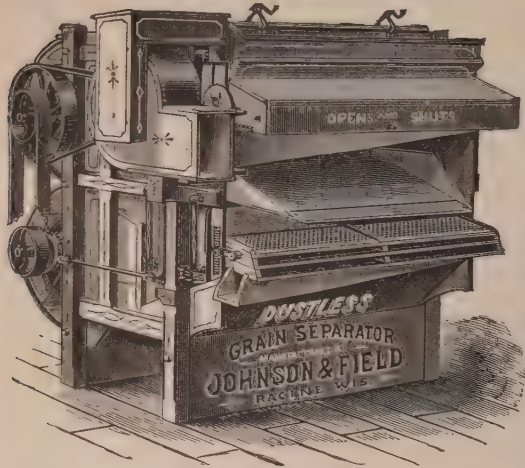
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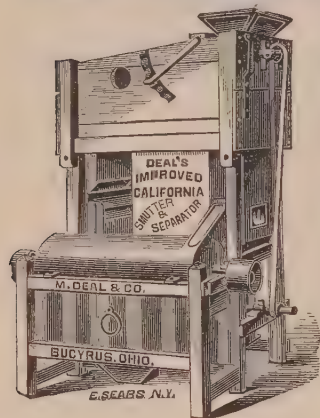
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 We Can refer Intending Builders to any and all of them.

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DEAL'S CALIFORNIA  
Grain Cleaning Machinery.

We manufacture a complete line of  
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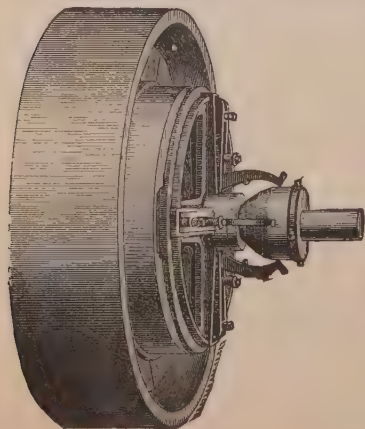
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Occupies very little Space.

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**CONTRACTORS FOR THE COMPLETE EQUIPMENT OF FACTORIES & MILLS OF ALL KINDS AGAINST FIRE.**  
ABUNDANT WATER SUPPLY. NO FREEZING. INSTANT ALARM. LOW INSURANCE.

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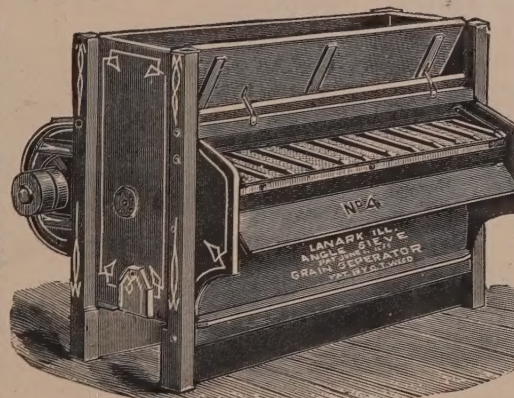
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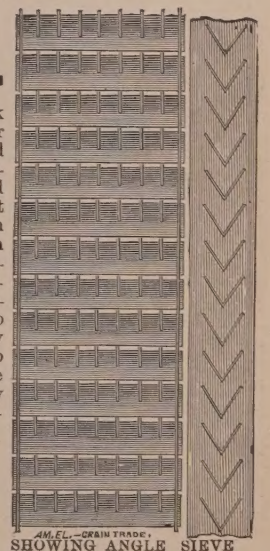


Everybody is astonished to see the work it does. We challenge competition, for general cleaning purposes. We CAN and WILL separate oats and wheat raised together, the first time through the Separator, and make it fit for market, and not run any wheat over in the oats. No other Separator can help running wheat over, where the suction or blast is depended on to make the separation, which we claim is not the correct principle of separation. The peculiar construction of the sieve, and the motion of it, do the work. We can take oats out of barley just as well, though not quite so fast. No other Separator attempts to do this. We can also clean buckwheat, flax, rice or any other small seeds that any other separator will handle.

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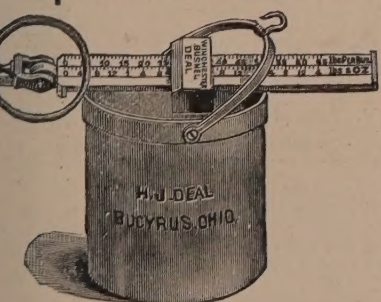
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ANGLE SIEVE GRAIN SEPARATOR SHOWING ANGLE SIEVE

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Invaluable to parties handling Grain or Seed. Guaranteed perfectly Accurate. Every Elevator Man should have one. Send for new Illustrated List "E" and Special Prices for Cash.



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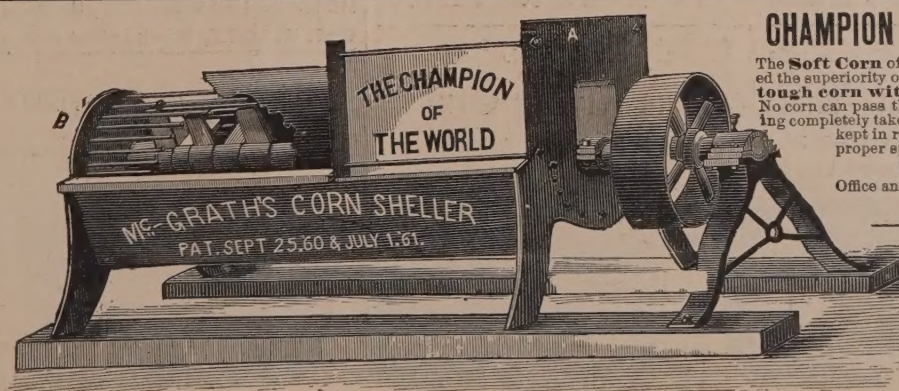
The Soft Corn of this year has again demonstrated the superiority of the "Champion" in shelling tough corn without breaking the grain. No corn can pass through this Sheller without being completely taken from the cob, if the machine is kept in reasonable repair, and run at the proper speed. Address

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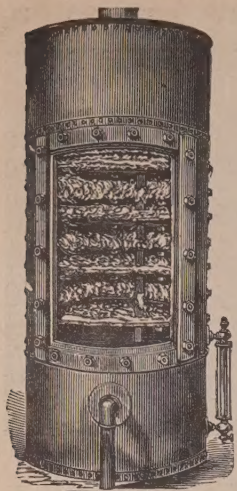
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AND McGrath's Twin Corn Sheller and Cleaner.

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AND FILTER COMBINED.

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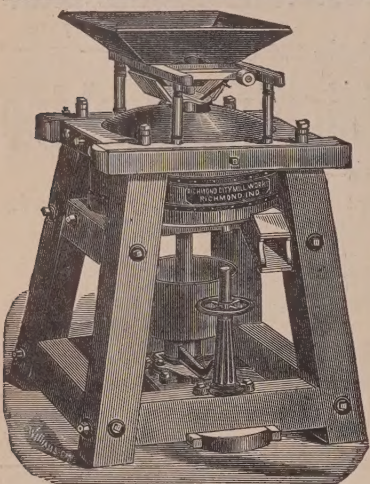
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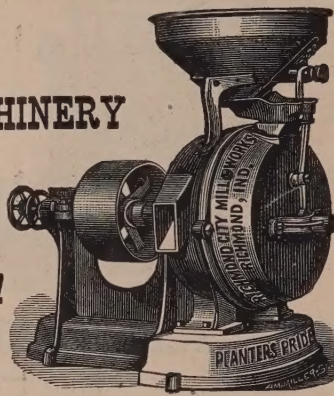
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For oiling valves and cylinders of steam engines, by the only perfect method, **Through the Steam Pipe.** The oil passes in Sight, drop by drop, into the column of steam, where it atomizes, thus becoming a **STEAM LUBRICANT**, oiling perfectly every part reached by the steam. Saves from 50 to 90 per cent. in oil and wear of machinery, thus paying for itself several times a year. A cup will be sent to responsible parties on 30 days' trial if desired.

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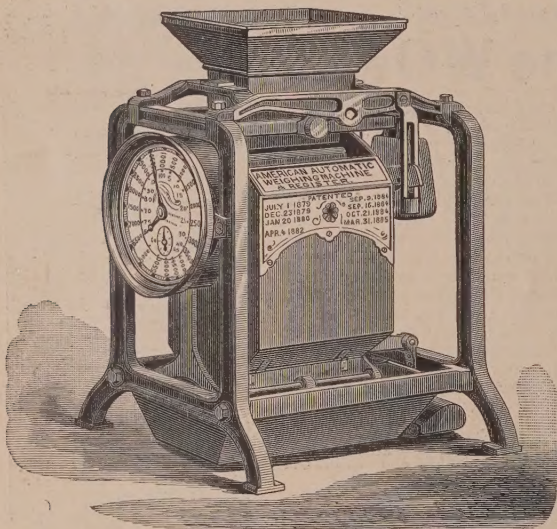
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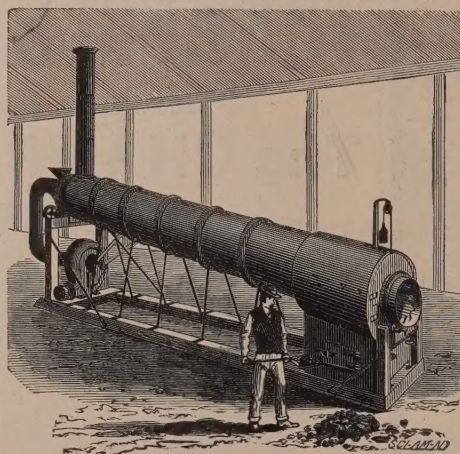
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FOR UNLOADING CARS

Is without clutches and driven by paper friction. It works automatic and noiseless, and the length of pull of hoist rope can be instantly adjusted. A big saving in ropes, scoops, lubricants and repairs over all other Shoveling Machines, so much so that the entire cost of a machine will be saved by its more economical operation within a few years. **Eleven Double Machines have been in practical operation in Rock Island Elevator "A" Chicago, since 1882.**

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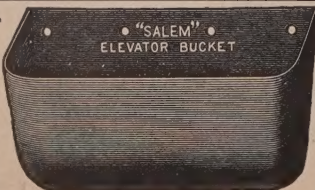
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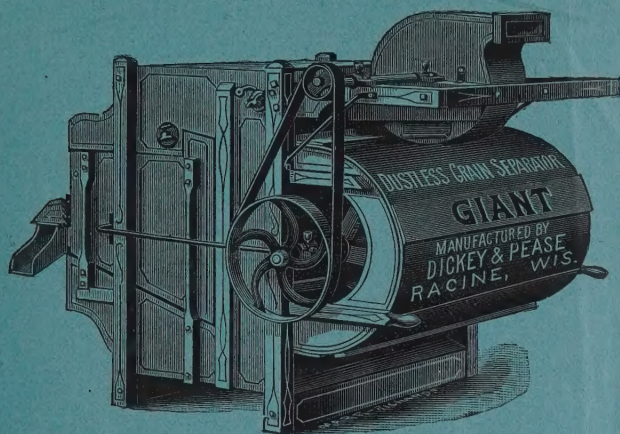
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We claim for the "Giant" **Superiority over all other Separators** for the following strong reasons:

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3d.—The cost is not much over one-half that of

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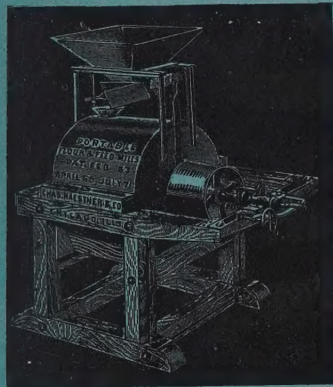
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These Separators are also made with the "side shake" for the special purpose of cleaning Flax Seed.

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Each Mill Guaranteed to Give Entire Satisfaction, or Money Refunded.

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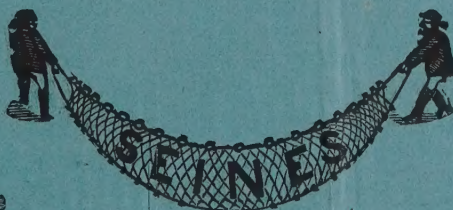
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Of the Finest English CRUCIBLE STEEL, and Best Selected CHARCOAL IRON.

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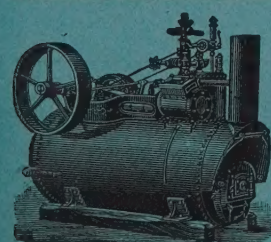
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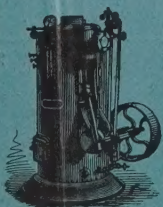
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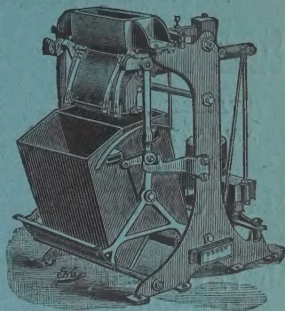
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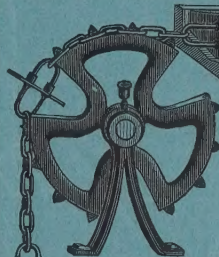
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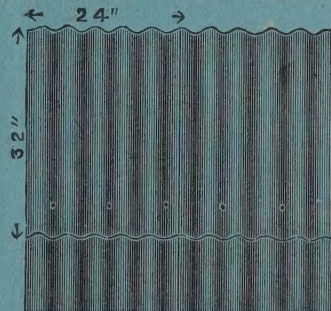
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PLAIN,  
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Invaluable for Repairing and Pointing Up all kinds of Water Leaks around Chimneys, Copings, Skylights, Gutters, Cupolas, Dormer Windows, Slate, Stone, Brick, Wood, Iron, etc. Slate Roofs, Hips or Joints, Copings, Iron, Stone or other work bedded in this Cement will never leak or become loosened.

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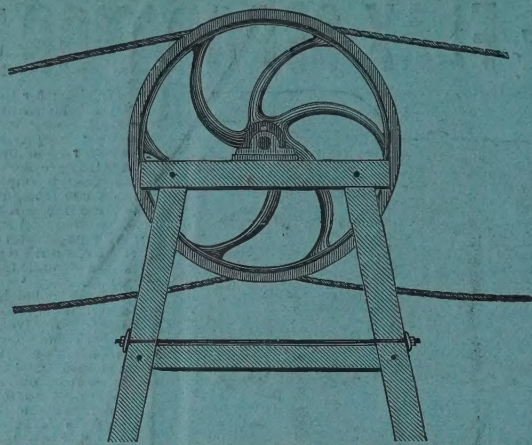
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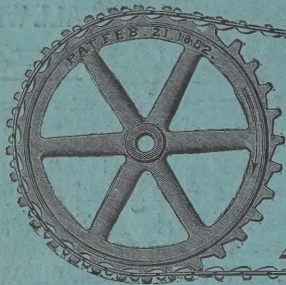
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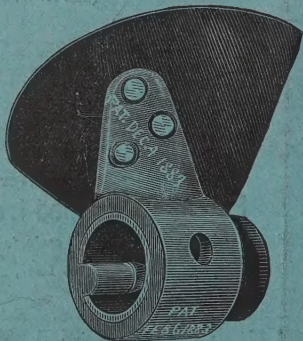
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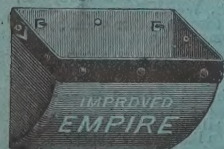


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**COUPLING.**—Our Coupling has points of advantage over any Conveyor Coupling in the market. The collar into which the Coupling fits is made of steel, and has, on its inner side, a feather, "A," which fits into the slot "B," in coupling, thus relieving the shaft of all twisting strain.

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